DEPARTMENT OF COMMERCE AND LABOR BUREAU OF THE CENSUS

E. DANA DURAND, DIRECTOR

BULLETIN 106

SUPPLY AND DISTRIBUTION OF COTTON

FOR THE YEAR ENDING AUGUST 31, 1909



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LETTER OF TRANSMITTAL.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF THE CENSUS,
Washington, D. C., November 15, 1909.

Dana Durand

SIR:

I have the honor to transmit herewith Census Bulletin 106, containing a report on the supply and distribution of cotton in the United States for the year ending August 31, 1909. The statistics were collected and compiled under the supervision of Mr. William M. Steuart, chief statistician for manufactures, assisted by Mr. Daniel C. Roper, expert special agent.

The report was authorized by a joint resolution of Congress, approved February 9, 1905, and forms the complement to the report on production, compiled from the returns of the ginners. It is the fifth of the series and completes the statistics collected by this office relative to the cotton crop of 1908. The report is presented in three divisions: (1) The supply of cotton in the United States for the year ending August 31, 1909, and the distribution of the same, including statistics of imports and exports of cotton and cotton goods, spindles, cotton consumed, and stocks distributed according to actual holders; (2) the latest available data regarding the industry in foreign countries; and (3) the commercial and industrial importance of American cotton.

Very respectfully,

Director.

Hon. Charles Nagel, Secretary of Commerce and Labor.

SUPPLY AND DISTRIBUTION OF COTTON.

(FOR THE YEAR ENDING AUGUST 31, 1909.)

By DANIEL C. ROPER.

GENERAL SUMMARY.

The following summary shows, under certain general headings, the supply of cotton in the United States for the past year and the distribution of this supply. Detailed figures are presented elsewhere in the report.

TABLE 1.—SUPPLY AND DISTRIBUTION OF COTTON IN THE UNITED STATES, FOR THE YEAR ENDING AUGUST 31, 1909.

Supply.	
Total	Running bales. ¹ 15, 312, 885
Stocks held September 1, 1908	1, 236, 058
By manufacturers in cotton-growing states By manufacturers in all other states By transportation companies In warehouses and compresses By merchants, buyers, cotton-seed-oil mills, and ginners By producers Cotton grown in 1908 returned as ginned after August 31, 1908	481, 713 72, 186 444, 626 72, 223 52, 839
Cotton grown in 1909 returned as ginned before September 1, 1909	388, 242 165, 451
DISTRIBUTION.	
Total	15, 312, 885
Cotton consumed	5, 240, 719
By manufacturers in cotton-growing states By manufacturers in all other states	2, 553, 797
Cotton destroyed by fire	8, 574, 024
By manufacturers in cotton-growing states By manufacturers in all other states By transportation companies In warehouses and compresses By merchants, buyers, cotton-seed-oil mills, and ginners By producers	186, 458 720, 639 165, 642 325, 099 59, 226 26, 521

¹ Statistics of foreign cotton have been reduced to equivalent 500-pound bales.

SOURCES OF THE DATA.

The data for the statistics of cotton grown are collected by local agents of the Census Bureau who canvass the ginneries. Those for the statistics of cotton consumed, of stocks held, and of cotton destroyed by fire are secured by these local agents in the cottongrowing states, while in all other states the data are collected by correspondence and by special agents who canvass the important mill centers. Owing to the impracticability of making a house-to-house canvass, stocks in the possession of merchants, buyers, and growers include some estimates made by the canvassing agents. In order to avoid duplication, stocks at ports, generally known as "port stocks," have been distributed according to the classes of holders named in the table. The statistics for imports and exports are compiled from reports of the Bureau of Statistics, Department of Commerce and Labor.

SUPPLY.

According to the statistics of Table 1, the supply of cotton in the United States for the year ending August 31, 1909, was 15,312,885 running bales as compared with 13,358,707 for 1908 and 15,025,720 for 1907. This marked gain of 1,954,178 bales as compared with 1908 is due mainly to the large crop of the year last named, 2,106,249 bales larger than that of the previous year, although there was also an increase in the quantity of cotton imported. The consumption of cotton in this country during the year ending August 31, 1909, was 701,629 bales more than during the preceding year, and the exports about 1,000,000 bales more. The stocks of cotton in this country at the close of August amounted to 1,483,585 bales compared with 1,236,058 bales on the corresponding date of the previous year. Stocks held by manufacturers in the cotton-growing states show an increase from 112,471 bales to 186,458 bales, and in all other states from 481,713 bales to 720,639 bales. The holdings of transportation companies this year are approximately 93,000 bales in excess of last year, but the stocks in warehouses and compresses, and those held by producers, merchants, etc., all show losses, the aggregate amounting to about 159,000 bales.

It will be observed that the statistics relative to the supply of cotton presented in Table 1 fail, by 493,232 bales, to balance with those presented for the distribution, and this discrepancy is shown in the table under the heading "To balance distribution." As there are so many agencies and holders to be canvassed in collecting the statistics on the supply and distribution of cotton, and as numerous conditions exist which tend to create discrepancies, it is not surprising that a difference should be revealed by the balance sheet. Among the factors responsible for this condition may

be named the following: (1) The inclusion of rebaled samples, commonly called "city crop;" (2) the lack of uniformity on the part of manufacturers in returning stocks, since, notwithstanding the endeavors made to impress all holders of cotton with the necessity of returning stocks in accordance with census schedules, slight duplications may result from manufacturers reporting in their stocks cotton held for them in independent warehouses, which may also be returned by the managers of these places of storage; and (3) an understatement by ginners and delinters of the quantity of cotton produced, due largely to the inability of these agencies to estimate accurately the quantity of cotton remaining to be ginned and the quantity of linters to be saved from reginning cotton seed at the time of the March canvass for production.

It is impossible to state, with any degree of assurance, how much any one or all of these factors contribute to the discrepancy. The amount of error to be charged to each will no doubt vary in different seasons, but a considerable part of the discrepancy between the figures for supply and those for distribution will always be attributable to the first cause. Between the time a bale of cotton leaves the ginnery and the time when it reaches the consumer it is "sampled" a number of times—that is, small quantities of the fiber are extracted from the bale by successive bidders for use in determining its value, and these samples, with cotton otherwise removed from the original package, are rebaled and counted in the statistics of exports, consumption, and stocks. A system using for its basis of supply an enumeration at the ginneries, before any samples have been removed, does not include this cotton, and its inclusion in the statistics of distribution is a source of duplication. The amount of this rebaled cotton will vary in different seasons from 100,000 to 200,000 bales, depending upon the size of the crop, as well as on other conditions.

The plan of collecting reports of cotton production through the ginners not only results in reliable statistics, if full returns are secured, but enables a segregation with regard to the year of growth and the locality where grown not possible under other systems; furthermore, the reports of production collected in this way, showing the crop of the preceding year, are issued as early as April 1, a saving in time of some five months over the commercial system, through which full reports can not be secured until after August 31, the close of the commercial year. Again, by obtaining full reports of cotton ginned to specified dates during the season, it is possible to make comparisons of the statistics of one year with those for the same date in previous years, and thus to judge of the volume of successive crops with a degree of accuracy not otherwise possible. The report on cotton production, compiled from the returns of ginners, and its complement, that on the supply and distribution of cotton, become mutual checks on each other.

Imports.—The imports of raw cotton, by countries, for selected years from 1890 to 1909, are shown in the following table:

Table 2.—Imports of raw cotton (500-pound bales), by countries from which imported: 1890 to 1909.

[The statistics in this table are for the year ending August 31, with the exception of those for 1890, 1895, 1900, and 1905, which are for the year ending June 30.]

YEAR.	Total.	Egypt.	United Kingdom.	Peru.	Other coun- tries.
10 09 1908 1907 1906 1906 1906 1900 1885 1890	170,069 143,490 228,793 133,405 121,017 134,797 98,664 117,212	132, 882 122, 170 168, 122 105, 697 104, 873 107, 109 59, 864 5, 896	17, 190 10, 379 19, 726 17, 754 8, 853 20, 957 35, 478 10, 124	11,969 5,917 7,619 6,397 5,439 5,575 2,394 603	8,028 5,024 33,326 3,557 1,852 1,156 928 589

1 Includes cotton waste.

The quantity of cotton imported into the United States during the year ending August 31, 1909, was 85,034,435 pounds, of which 2,309,097 pounds were reexported, thus making the net imports 82,725,403 pounds, equivalent to 165,451 bales of 500 pounds each. This is an increase of 24,581 bales compared with 1908, and a decrease of 37,282 bales compared with 1907.

Practically all of the cotton imported is Egyptian and Peruvian, used largely in the manufacture of thread and knit goods and as a substitute for wool in the manufacture of woolen goods. The large amount shown for "Other countries" in 1907 includes 28,354 bales of Mexican cotton, a large part of which in reality only passed through American ports in transit to Europe.

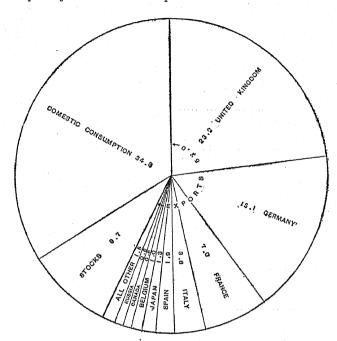
DISTRIBUTION.

Of the total supply of cotton for 1909, shown in Table 1, 5,240,719 bales, or 34 per cent, including that destroyed by fire, were consumed in this country; 8,574,024 bales, or 56 per cent, were exported; while 1,483,585 bales, or 10 per cent, remained in the coun-

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try at the close of the year. Of the supply for the preceding year, 34 per cent was consumed at home, 57 per cent was exported, and 9 per cent remained in the country at the close of the year. The slight variation shown in the different proportions for the two years is interesting when it is remembered that the supply for 1909 is 1,954,178 bales in excess of that for 1908.

DIAGRAM 1.—Proportion of supply of cotton for 1909 consumed in the United States, held in stocks, and exported, with distribution of exports by countries to which exported.



Cotton manufacturing in the United States.—The statistics of spindles, and of stocks and of consumption of cotton have been collected by special agents and by direct correspondence. In the cotton-growing states the agents were those appointed to collect the statistics of cotton ginned, while in the concentrated mill centers in other states representatives were detailed from the bureau for this work. The results of this canvass, relating to cotton-consuming establishments, are presented in Table 3.

TABLE 3.—NUMBER OF COTTON-CONSUMING ESTABLISHMENTS, NUMBER OF SPINDLES, QUANTITY OF COTTON CONSUMED, AND STOCKS HELD BY MANUFACTURERS ON AUGUST 31, BY STATES: 1906 TO 1909.

	Ņu		COTTON	spindles.	Spindles consuming		COTTON CO	NSUMED.		STOCKS I	
STATE.	Year.	ber of estab- lish- ments.	Total (number).	Active (number).	cotton mixed with other fibers (number).1	Running bales	Equivale	nt 500-pound	i bales.	Total (running	Foreign (500-pound
			(Humber).	(Humber).		(number).2	Total.	Domestic.	Foreign.	bales).2	bales).
United States	1909 1908 1907 1906	1,910 1,941 1,830 1,732	28, 573, 435 27, 964, 387 26, 939, 415 25, 811, 681	28,018,305 27,505,422 26,375,191 25,250,096	558,792 602,340 651,251	5,240,719 4,539,090 4,984,936 4,909,279	5,198,963 4,493,028 4,974,199 4,877,465	5,037,225 4,343,400 4,833,831 4,738,990	161,738 149,628 140,368 138,475	907,097 594,184 1,016,738 680,471	65,563 62,303 79,820 40,118
Alabama	1909 1908 1907 1906	72 71 74 68	984, 534 939, 942 904, 244 870, 154	948,068 934,642 876,944 851,986		250, 380 202, 177 239, 149 244, 058	250, 369 201, 965 239, 479 243, 224	250, 129 201, 536 238, 901 242, 462	240 429 578 762	18,511 11,302 29,946 21,619	157 289 218 195
Arkansas	1909 1908 1907 1906	9 10 7 11	14,324 14,324 14,324 17,324	1		1 1	6,340 4,143 4,402 3,913	6,340 4,143 4,402 3,913		760 591 825 474	
California	1909 1908 1907 1906	20 22 15 (3)	15,500 15,500 12,284 11,000	15,500 15,500 12,284 11,000	4,400	14,574 12,602 15,997 13,120	14,551 12,940 16,411 13,396	14,532 12,940 16,403 13,396	19	1,165 2,432 3,590 1,368	
Connecticut	1909 1908 1907 1906	80 85 86 86	1,253,582 1,240,296 1,222,239 1,181,913	1,246,068 1,236,903 1,215,435 1,174,527	39,724 45,154 52,630	142,685 128,791 147,450 148,692	144,047 128,798 148,632 148,877	129,052 111,687 132,247 135,211	14,995 17,111 16,385 13,666	53,081 35,654 49,060 38,107	3,437 4,097 9,844 3,100
Georgia	1909 1908 1907 1906	157 154 149 138	1,831,714 1,792,790 1,682,506 1,573,450	1,797,484 1,757,686 1,610,004 1,546,998	15,612 13,876 14,060	540,818 474,986 521,777 513,814	523,646 458,475 505,078 497,300	521,514 456,379 502,549 491,411	2,132 2,096 2,529 5,889	33, 204 19, 732 62, 400 38, 792	1,677 422 821 1,452
Illinois	1909 1908 1907 1906	44 48 37 34	41,988 35,488 31,488 31,488	41, 988 35, 488 31, 488 31, 488	2,776 2,774 4,646	21,920 13,500 13,412 12,154	22,275 13,073 13,710 12,092	22,259 13,671 13,687 12,034	16 2 23 58	2,519 1,299 1,575 723	2 2 3
Indiana	1909 1908 1907 1906	27 28 21 19	128,856 137,277 134,068 134,188	128,856 128,568 122,568 126,688	8,904 8,904 11,904	31,280 27,586 27,754 28,389	31,920 27,883 28,428 29,122	31,920 27,883 28,416 29,082	12 40	3,429 1,796 4,445 2,524	2
Kansas	1909 1908 1907	14 14 12	10,708 10,000 5,000	10,708 10,000 5,000	1,440 1,000 2,440	5,146 3,873 3,004	5,086 3,962 2,959	5,086 3,962 2,959		561	
Kentucky	1909 1908 1907 1906	13 16 16 14	88,096 85,700 85,764 85,692	83,080 82,700 82,764 82,692	5,000 14,324 14,164	25,353 23,566 25,785 27,970	25,708 23,738 26,618 28,531	25,708 23,738 26,618 28,531		5,220	
Louisiana	1909 1908 1907 1906	15 16 14 12	89,152 89,552 88,724 95,200	69,152 69,552 68,724 92,700		15,949 13,826 17,050 17,578	15,993 13,804 17,089 17,415	15,993 13,804 17,089 17,415		799	
Maine	1909 1908 1907 1906	36 35 35 34	1,005,258 978,188 976,017 931,576	990, 712 978, 188 966, 864 912, 593	31, 436 24, 632 40, 853	161, 099 149, 870 157, 152 163, 297	163, 821 153, 887 163, 349 169, 064	162, 859 153, 049 162, 441 168, 403	962 838 908 661	51,350 27,915 37,616 28,312	608 417 476 176
Maryland	1909 1908 1907 1906	15 17 16 14	152,266 151,000 153,392 156,396	144,290 148,816 142,384 134,112	9,000 9,000 9,000	61, 294 54, 320 64, 998 60, 223	60, 855 53, 429 64, 202 59, 982	64,202 59,982		2,339 2,168 4,445 3,483	
Massachusetts	1909 1908 1907 1906	204 203 204 210	9,688,637 9,446,380 9,158,389 8,904,725	9,575,461 9,415,363 9,097,236 8,790,793	57, 560 63, 926 70, 462	1,321,572 1,146,619 1,253,856 1,234,182	1,339,819 1,155,426 1,279,393 1,252,879	1,250,026 1,070,404 1,202,514 1,173,626	89,793 85,022 76,879 79,253	355, 474 233, 024 367, 098 255, 326	39, 504 34, 089 47, 729 25, 957
Michigan	1909 1908 1907 1906	14 15 12 (8)	15, 876 15, 576 15, 600 15, 000	15, 876 15, 576 15, 600 15, 000	2,680 2,280 5,432	4,534 4,809 4,632 3,816	4,492 4,921 4,736 3,916	4,492 4,921 4,657 3,903	79 13	2,460 2,447 1,920 890	6
Mississippi	1909 1908 1907 1906	27 28 26 26	176, 640 173, 216 173, 064 165, 188	159, 468 171, 720 162, 696 147, 474	8,345 8,404	37, 522 34, 383 37, 929 40, 197	37, 131 34, 385 37, 475 39, 958	37,131 34,385 37,475 39,958		3,491 2,566	
Missouri	1909 1908 1907 1906	35 39 39 26	27, 776 27, 776 14, 416 14, 016	27,776 27,776 14,416 14,016	2,500 5,616 312	16,711 10,669 9,491 7,146	16,848 10,690 9,721 6,867	16,848 10,690 9,721 6,867		2,289 1,415 1,168 534	
New Hampshire	1909 1908 1907 1906	36 41 44 46	1,313,581 1,320,503 1,325,135 1,329,027	1,313,357 1,318,327 1,307,357 1,296,445	44,897 39,302 50,520	278, 457 243, 494 277, 941 283, 853	285, 248 247, 510 286, 122 291, 349	281,806 244,752 284,454 290,525	3,442 2,758 1,668 824	91,684 54,092 82,966 54,124	958 1,442 1,235 175
New Jersey.	1909 1908 1907 1906	32 33 28 27	460, 888 447, 029 435, 128 435, 813	445,310 441,733 425,791 417,679	27,304 32,112 14,563	52, 416 44, 904 48, 294 54, 597	51,286 43,926 47,036 52,161	37,228 32,640 37,325 44,009	14,058 11,286 9,711 8,152	15,395 14,418 9,217 10,666 "All other s	7,996 7,408 5,297 2,840

¹ Not shown separately for 1906.

² Statistics of foreign cotton have been reduced to equivalent 500-pound bales.

³ Included in "All other states."

TABLE 3.—NUMBER OF COTTON-CONSUMING ESTABLISHMENTS, NUMBER OF SPINDLES, QUANTITY OF COTTON CONSUMED, AND STOCKS HELD BY MANUFACTURERS ON AUGUST 31, BY STATES: 1906 TO 1909—Continued.

		Num- ber of		Num-		SPINDLES.	Spindles consuming	COTTON CONSUMED.					HELD BY CTURERS.
STATE.	Year.	estab- lish- ments.	Total	Active	cotton mixed with other fibers (number).1	Running bales	Equivale	ent 500-pound	i bales.	Total (running	Foreign (500-pound		
. "			(number).	(number).	(Humber).	(number).2	Total.	Domestic.	Foreign.	bales).2	bales).		
Now York	1909 1908 1907 1906	132 135 128 112	942, 521 928, 316 927, 796 852, 826	931, 525 910, 604 900, 506 802, 254	103,330 106,044 110,862	218,780 171,289 191,884 176,739	222, 196 172, 651 195, 108 179, 054	218, 485 171, 577 193, 204 176, 511	3,711 1,074 1,904 2,543	31,384 22,094 37,797 22,838	957 969 251 388		
North Carolina	1909 1908 1907 1906	297 293 276 251	3,010,367 2,944,404 2,681,386 2,396,703	2, 934, 124 2, 861, 446 2, 604, 444 2, 341, 792	5,452 8,240 6,556	756,677 637,401 710,275 075,332	722, 725 609, 305 684, 361 644, 920	719,508 607,026 681,306 642,496	3, 217 2, 279 3, 055 2, 424	52,188 27,253 84,542 44,417	415 45 314 428		
Ohio	1909 1908 1907 1906	38 39 31 29			16,562 16,402 19,427	28, 222 24, 483 24, 533 21, 682	29,217 24,953 25,373 21,976	29,216 24,953 25,357 21,976	1 16	10,633 13,756 8,564 9,353	1 2		
Oklahoma	1909 1908 1907	12 10 8	5,712 5,712 2,856	5,712 5,712 2,856		5,269 3,447 2,238	5,314 3,481 2,264	5,314 3,481 2,264		564 298 388			
Pennsylvania	1909 1908 1907 1906	123 126 132 124	275,654 268,310 278,737 316,235	264, 437 257, 929 263, 205 288, 143	120,037 134,238 137,190	80, 541 78, 071 86, 825 86, 564	80, 521 78, 542 88, 619 87, 434	75,364 74,085 82,465 81,266	5,157 4,457 6,154 6,168	12, 431 11, 120 12, 933 10, 282	1,360 975 1,225 625		
Rhode Island	1909 1908 1907 1906	72 77 74 76	2,399,440 2,388,105 2,242,931 2,173,868	2, 361, 069 2, 279, 957 2, 218, 905 2, 130, 958	7,340 8,516 12,556	230, 425 215, 831 223, 035 217, 118	233,675 217,917 229,322 221,353	213,066 199,022 211,852 207,277	20,609 18,895 17,470 14,076	77,815 54,366 76,250 54,019	7,920 11,808 11,433 4,332		
South Carolina	1909 1908 1907 1906	152 150 145 141	3,819,149 3,713,006 3,609,969 3,367,204	3,715,894 3,617,358 3,502,036 3,345,075		696, 462 610, 734 668, 883 674, 588	673,994 591,188 649,173 650,291	671,219 588,176 646,671 646,614	2,775 3,012 2,502 3,677	53,149 32,783 96,487 55,642	323 273 889 322		
Tennessee	1909 1908 1907 1906	50 51 45 37	272,856 265,198 253,148 258,794	253, 762 249, 604 230, 358 212, 062	25, 828 21, 754 23, 482	69,653 57,876 62,522 58,244	69,148 57,365 60,103 58,490	69,148 57,365 60,103 58,490		9,052 5,362 10,508 7,845			
Texas	1909 1908 1907 1906	62 55 52 52	106,528 106,924 109,892 101,759	98,604 103,428 103,992 93,687		42,210 33,635 38,602 40,023	43,610 34,258 39,362 41,282	39,362 41,282		3,097 2,178 5,443 2,122			
Vermont	1909 1908 1907 1906	13 16 15 15	105,184 107,324 107,324 107,172	105,184 100,592 106,720 102,264	15,152 17,812 24,032	10,210 10,230 13,921 12,758	10,471 10,351 14,174 13,082	9,878 10,014 13,726 12,859	593 337 448 223	1,912 712 4,470 1,342	233 67 78 122		
Virginia	1909 1908 1907 1906	29 30 29 33	315,676 295,579 272,710 253,206	311,644 295,579 250,758 253,206	4,018 3,923 4,738	84, 176 75, 182 66, 668 68, 919	78,676 72,605 67,787 68,997	78,676 72,605 67,785 68,991	2 6	9,085 5,283	i		
Wisconsin	1909 1908 1907 1906	16 19 13 (³)	13,612 13,612 13,940 13,612	2,112 13,612 13,940 13,612	4,104 4,040 1,992	9, 105 8, 710 9, 200 9, 756	9,213 8,714 9,338 9,802	9,205 8,683 9,304 9,772	8 31 34 30	1,608 1,878 1,528 963	1 2		
All other states	1909 1908 1907 1906	64 65 47 97	7,360 7,360 6,944 18,152	7,360 7,360 6,944 7,672	8,136 5,726 11,026	20, 954 18, 102 14, 268 10, 524	20,768 18,143 14,375 10,738	20,758 18,142 14,372 10,728	10 1 3 10	6,025 2,544 1,999 2,408	14		

¹ Not shown separately for 1906.

² Statistics of foreign cotton have been reduced to equivalent 500-pound bales.

³ Included in "All other states."

Of the 1,910 establishments shown in the table, 1,884 consumed raw cotton during the year ending August 31, 1909, while 26, with 167,975 spindles, were continuously idle throughout the year. There were 778 establishments which were returned as having no cotton spindles, but which consumed 223,092 bales. In some instances where more than one mill in the same locality is under the same management, consolidated returns have been received, consequently the number of establishments given in the table is somewhat less than the actual number. Establishments engaged exclusively in weaving, and which therefore do not use raw cotton, are not included. The loss of 31 establishments during the past year is due almost entirely to the use this year of cotton felts by mattress manufacturers who formerly consumed raw cotton. Statistics for all establishments consuming raw cotton are, however, included in this report.

Spindles.—The total number of cotton spindles in the United States, shown in Table 3, represents only those designed primarily for spinning cotton, and therefore does not include those which consumed a mixture of cotton with other fibers. The number of cotton spindles returned in 1909 was 28,573,435, exceeding the number for 1908 by 609,048, or slightly more than 2 per cent. The increase in the number of spindles shown in 1907 over that for 1906 was 1,127,-734, or 4.4 per cent, while the increase in 1908 over the number in 1907 was 1,024,972, or nearly 4 per cent. The comparatively small number of spindles added during the past year is attributable to some extent to the effects of the financial depression of 1907. There were 555,130 spindles in 1909 returned as having been idle and which consumed no cotton whatever during the year. Of these, 167,975 spindles were in plants not operated during the year, and 387,155 in mills which consumed some cotton. The number of idle spindles includes some new spindles which were only in place for operation at the close of the year, and had not then been brought into service.

In the number of cotton spindles Massachusetts exceeds every other state, having 9,688,637, or 34 per cent of the total; South Carolina ranks second, with 3,819,149, or 13 per cent; and North Carolina third, with 3,010,367, or 11 per cent. Rhode Island has fourth place, Georgia fifth, New Hampshire sixth, Connecticut seventh, and Maine eighth. No other state reports as many as a million spindles.

In addition to the spindles designed primarily to spin cotton, 558,792 spindles have been returned as having consumed cotton mixed with other fibers during the year. This compares with 602,340 in 1908 and 651,251 in 1907. The variation may be accounted for by the fact that in some instances spindles are employed during one year on cotton or other fibers exclusively, and therefore would not appear under this heading, and during the next year they may be used in spinning cotton mixed with some

other fiber. The states reporting the largest number of such spindles are naturally those which lead in the manufacture of woolen and knit goods. Of the total number of these spindles reported, 120,037, or 21 per cent, were returned from Pennsylvania; 103,330, or 18 per cent, from New York; 57,560 from Massachusetts; and 44,897 from New Hampshire.

The tendency in the United States is to employ ring-frame spindles rather than mules, as is evidenced by the fact that of the 28,573,435 spindles in this country, approximately 23,037,094 are ring and 5.536.341 are mules. Because of the ease and facility with which the former can be operated, manufacturers generally prefer them to mules, except when special kinds of varns are required. Since 1905 there has been a small relative increase in the number of mule spindles, but the decrease between 1900 and 1905 amounted to 341,623, notwithstanding the fact that during this period the total number of spindles increased 4,147,261. Nearly four-fifths of all the mule spindles in the country are in New England cotton mills, and most of the remainder in New York and New Jersey. There are some kinds of yarns requiring special qualities which can not be made successfully by ring spinning, and for this reason there will always be a demand for mules—at least until the difficulties met with hitherto can be overcome. There are, however, reasons connected with the question of labor which induce manufacturers to use frames rather than mules wherever it is practicable to do so.

Consumption of cotton.—The statistics of consumption of cotton are for all establishments returned as using raw cotton, and include cotton mills, woolen mills, knitting factories, and those establishments which use raw cotton in the manufacture of mattresses, batting, felts, etc. The quantity consumed during the year amounted to 5,240,719 bales compared with 4,539,090 in 1908 and 4,984,936 in 1907. The average weekly consumption of cotton in the United States during the year ending August 31, 1909, amounted to 100,783 bales, compared with 87,290 bales for 1908 and 95,864 bales for 1907. While the cotton manufacturing industry in the United States in 1909 was not as prosperous as in 1906 and 1907, it was, nevertheless, far more satisfactory than in 1908 both as regards the volume of the goods produced and the profits secured. An abundant supply of raw cotton, with an excellent staple at a low price, contributed very largely to this result.

Massachusetts is the leading state in the consumption of cotton, with 1,321,572 running bales, or 25 per cent of the total for 1909, followed by North Carolina, with 756,677 bales, and South Carolina, with 696,462 bales. The relative amounts reported for the last two states are surprising in view of the fact that South Carolina has 781,770 active spindles more than are reported for the mills of North Carolina. The apparent discrepancy in the figures probably results

from the lighter weight bales used in North Carolina and from the tendency in South Carolina to spin finer counts. Georgia ranks fourth in the quantity of cotton consumed, with 10 per cent of the total; New Hampshire ranks fifth, Alabama sixth, and Rhode Island seventh. As indicated above, a comparison on the basis of spindles gives some of the states a somewhat different rating.

Segregation of cotton consumed.—The statistics of Table 3 include both domestic and foreign cotton, which are segregated in the following table according to the different kinds of cotton used:

Table 4.—Segregation of the statistics of the several kinds of cotton represented in the takings, consumption, and stocks of manufacturers.

•	B 1 1	CON	SUMED.	Stocks held
	Taken by manufac-			by manu-
KIND.	turers (running bales).	Running bales.	Pounds.	facturers August 31, 1909 (run- ning bales).
Cotton-growing states.	·			
Domestic: Sea-island Other	7,817 2,610,000	6,564 2,538,869	2,527,521 1,231,100,686	1, 693 182, 193
Foreign: Egyptian Peruvian Indian Other	5,686 160 1,806 25	4,769 160 1,588 15	3,498,992 32,000 644,756 6,409	1,521 368 10
All other states.			. ,,,,,,,	
Domestic: Sea-island Other	70, 786 2, 699, 971	61, 185 2, 472, 363	23,746,752 1,261,237,418	29, 293 628, 355
Foreign: Egyptinn Peruvian Indian Other	93,003 21,457 11,181 148	93, 523 18, 525 8, 728 108	69, 514, 487 3, 719, 523 3, 395, 913 56, 887	38,873 4,488 4,564 54

The statistics presented in the above statement indicate that in the cotton-growing states the manufacturers rely almost exclusively upon domestic upland cotton for their supply. The quantity of seaisland cotton consumed in 1909 was only 2,527,521 pounds, while the foreign cotton consumed, which was practically all Egyptian, amounted to only 4,182,157 pounds. The main dependence in all other states is likewise on domestic upland cotton, although 23,746,752 pounds of sea-island cotton and 76,686,810 pounds of foreign cotton were used. Of the foreign cotton consumed in the country during the year, 73,013,479 pounds were Egyptian, 3,751,523 pounds Peruvian, and 4,040,669 pounds Indian.

The variety of Egyptian cotton most largely used by American manufacturers is Mit Afifi, which averages 1½ inches in length and furnishes numbers of yarns up to 70's and 80's. Jannovitch, and to a small extent Abbasi, averaging 1½ to 1½ inches in length of fiber, are used as a substitute for the lower grades of sea-island in manufacturing fine yarns (100's and upward).

There are four principal reasons for the extensive use of Egyptian cottons in the United States: (1) They are best adapted to mercerizing and other processes that give a high finish to cloth and cause it to resemble silk; (2) their exceptional clearness (freedom from nap) and luster, as well as their capacity for taking dyes, fit them for mixing with silk and for filling sateen, India linens, and similar goods having a brilliant surface; (3) the brown color of Mit Afifi fiber allows it to be used without dyeing in manufacturing goods, such as Balbriggan underwear and lace curtains, in which the ecru shade is desired; and (4) they can be used for the manufacture of sewing thread and other articles which need to be very strong and for which no other type of cotton but sea-island is suitable. Owing to the higher price of the latter, Egyptian cottons can in many cases be advantageously substituted.

Distribution of cotton consumed according to character of establishment.—The following tabular statement shows the quantity of cotton consumed in 1907, 1908, and 1909, distributed approximately according to the different classes of establishments in which it was used:

	BALES CONSUMED.						
CLASS OF ESTABLISHMENT.	1909	1908	1907				
Total	5, 240, 719	4,539,090	4,984,936				
Mills reporting cotton spindles Woolen mills not reporting cotton spindles	5,017,627 17,712	4,339,450 23,205	4,751,748 40,538				
Knitting establishments not reporting cotton spindles. Bedding and mattress manufacturing estab-	18,829	18,682	23,849				
lishments All other establishments	122, 955 63, 596	98,381 59,372	96,155 72, 646				

The quantity of cotton consumed during 1909 in mills reporting spindles designed to spin cotton exclusively was 5,017,627 bales compared with 4,339,450 in 1908. In addition, 17,712 bales were consumed in woolen mills not having spindles used exclusively in spinning cotton, and 18,829 bales in knitting establishments. Considerable quantities of cotton and linters are used in the manufacture of batting, absorbent cotton, and the like. Many establishments which manufacture mattresses, bedding, and couches have machinery for preparing their own cotton. The quantity used in bedding and mattress manufacturing establishments during the past year has been returned as 122,955 bales, while that in all other establishments amounted to 63,596 bales.

The short fiber called "linters," obtained by cotton-seed-oil mills from reginning cotton seed before extracting oil, is included in the statistics of consumption and stocks as well as in the exports of raw cotton. The quantity of linters saved during the season of 1908-9, as reported to this bureau by delinters, amounted to 345,507 bales of 500 pounds each. This cotton is largely used in the manufacture of mattresses, batting, cheap yarns, rope, twine, felt hats, and weather strips, in mixing with shoddy, and in the manufacture of explosives and for upholstering purposes. Practically all of this linter cotton consumed in the United States in 1909 is included in the last two classifications of the above statement.

Growth of the industry.—To illustrate the growth of the cotton manufacturing industry in the several sections of the country, the following table, covering a series of years, has been prepared:

Table 5.—Production and consumption of cotton and number of active cotton spindles in the United States, for selected years: 1840 to 1909.

YEAR.	Section.	Production (bales).	Consump- tion (bales).	Active spindles (number).
1909	United States	13, 432, 131	5,240,719	28,018,305
	Cotton-growing states New England states	13, 432, 131	2,553,797 2,144,448 542,474	10, 429, 200 15, 591, 851 1, 997, 254
1908	United States	11,325,882	4,539,090	27, 505, 422
	Cotton-growing states New England states	11,325,882	2,187,096 1,894,835 457,159	10,200,903 15,329,333 1,975,186
1907	United States	13, 305, 265	4,984,936	26, 375, 191
	Cotton-growing states	13, 305, 265	2, 410, 993 2, 073, 355 500, 588	9,527,964 14,912,517 1,934,710
1906	United States	10,725,602	4,909,279	25,250,096
	Cotton-growing states	10,725,602	2,373,577 2,059,900 475,802	8,994,868 14,407,580 1,847,648
1905	United States	13,697,310	14,278,980	23,687,495
	Cotton-growing states	13,697,310	1 2,140,151 1 1,753,282 1 385,547	7,631,331 14,202,971 1,853,193
1900	United States	9,507,786	3,873,165	19,472,232
_	Cotton-growing states New England states	9,507,786	1,523,168 1,909,498 440,499	4,367,688 13,171,377 1,933,167
1890	United States	7, 472, 511	2,518,409	14,384,180
	Cotton-growing states. New England states. All other states.	7,472,511	538,895 1,502,177 477,337	1,570,288 10,934,297 1,879,595
1880	United States	5,755,359	21,570,344	² 10,653,435
,	Cotton-growing states. New England states. All other states.	5,755,359	² 188, 748 ² 1, 129, 498 ² 252, 098	² 561, 360 8, 632, 087 ² 1, 459, 988
1870	United States	⁸ 3,011,996	796, 616	7,132,415
	Cotton-growing states New England states All other states.	83,011,996	68, 702 551, 250 176, 664	327,871 5,498,308 1,306,236
1860	United States	8 5, 387, 052	845, 410	5, 235, 727
	Cotton-growing states	⁸ 5, 387, 052	93, 553 567, 403 184, 454	324,052 3,858,962 1,052,713
1850	United States	⁸ 2, 469, 093	575, 506	3,998,022
	Cotton-growing states New England states. All other states.	82,469,093	78, 140 430, 603 66, 763	264,571 2,958,536 774,915
1840	United States	2,063,915	236, 525	2, 284, 631
	Cotton-growing states	2,063,915	71,000 158,708 6,817	180,927 1,597,394 506,310

¹ Does not include foreign cotton.

The showing made by the statistics in this table is interesting and instructive. During the period covered the production increased from 2,063,915 bales to 13,432,131 bales, the consumption of cotton from 236,525 bales to 5,240,719 bales, and the number of active spindles from 2,284,631 to 28,018,305. The most remarkable feature of the table is the increase in the industry in the cotton-growing states since 1880. There were in these states twenty-nine years

ago 561,360 active cotton spindles, with a consumption of 188,748 bales of cotton; the statistics now show 10,429,200 spindles, with a consumption of 2,553,797 bales. Within the last nine years the consumption in these states increased 68 per cent, while in the New England states it increased 12 per cent, and in all other states 23 per cent.

The consumption of cotton in 1909 in the cotton-growing states was 2,553,797 bales compared with 2,187,096 in 1908, an increase of 366,701 bales as compared with an increase in the New England states of 249,613 bales. The increase during the year in the number of spindles in the cotton-growing states was 228,297 compared with an increase of 262,518 for the New England states.

So large a proportion of the cotton produced in the United States is exported that it is essential that the report on the supply and distribution of American cotton should seek to present reliable information relative to the condition of the textile industry in foreign countries. To meet this requirement, there has been published on pages 24 to 28 the latest available information relative to the number of spindles and the quantity of cotton consumed in the several countries using American cotton.

COTTON STOCKS IN THE UNITED STATES.

The quantity of baled cotton held in the United States on August 31, for the years 1907 to 1909, is shown by states, according to classes of holders, as shown in Table 6.

The distribution of stocks given in this table is very interesting because of the detailed segregation presented. In the canvass for the statistics of this report the bureau furnished its special agents forms upon which to list and return stocks in accordance with the classifications given in the table, and they were instructed to collect full and complete returns from all holders; but as it was impracticable to make a houseto-house canvass for stocks held by growers, some estimates by these agents are involved in the returns of this cotton. The statistics are, however, approximately correct. There were 1,483,585 bales remaining in this country on August 31, 1909, compared with 1,236,058 in 1908 and 1,514,567 in 1907. Stocks held by manufacturers at the close of 1909 amounted to 907,097 bales, compared with 594,184 in 1908, an increase of 312,913 bales. The manufacturers in the cotton-growing states held 186,458 bales, compared with 112,471 in 1908, while those in all other states held 720,639 bales in 1909, compared with 481,713 in 1908. The manufacturers of Massachusetts alone held 355,474 bales, or 39 per cent of the total stocks in the possession of manufacturers in 1909. Independent warehouses and compresses held 325,099 bales in 1909, compared with 444,626 bales in 1908 and 388,919 bales in 1907. The total quantity of cotton in the possession of transportation companies, producers, mer-

² Cotton mills only.

³ Bales of 400 pounds.

chants, buyers, ginners, and cotton-seed-oil mills was 54,141 bales greater than for the corresponding date last year. Included in these statistics is the quantity of linter cotton held at the close of the year, which amounted to approximately 60,000 bales.

Table 6.—Stocks of cotton held in the United States on August 31, 1907, 1908, and 1909.

			COTTON	IN THE A	CTUAL P	ossessio	ON OF-
STATE.	Year.	Total (bales).	Manu- factur- ers (bales).	Ware- houses and com- presses (bales).	Transportation companies (bales).	Pro- ducers (bales).	Other holders (bales).
United States.	1909	1,483,585	907,097	325,099	165, 642	26, 521	59,226
	1908	1,236,058	594,184	444,626	72, 186	52, 839	72,223
	1907	1,514,567	1,016,738	388,919	54, 596	14, 226	40,088
Alabama	1909	40,037	18,511	13,319	4,493	1,112	2,602
	1908	47,027	11,302	26,700	737	4,832	3,456
	1907	55,948	29,946	20,169	589	334	4,910
Arkansas	1909	10, 164	760	6,846	869	382	1,307
	1908	18, 221	591	13,571	(1)	1,054	3,005
	1907	11, 471	825	9,589	(1)	204	853
Georgia	1909	129,874	33,204	50,568	37, 430	3,638	5, 034
	1908	122,466	19,732	82,017	8, 276	6,797	5, 644
	1907	105,066	62,400	34,540	2, 785	1,070	4, 271
Louisiana	1909	46,752	324	34,714	9,933	1,078	703
	1908	37,104	538	34,734	(¹)	982	850
	1907	40,515	799	31,292	7,008	(1)	- 1,416
Mississippi	1909	24, 642	2,615	17,052	1,133	1,884	1,958
	1908	57, 852	1,735	45,789	1,918	4,005	4,405
	1907	16, 433	3,491	10,577	(¹)	1,123	1,242
Missouri	1909 1908 1907	5,833 11,886 7,208	2,289 1,415 1,168	3,544 10,471 6,040			(1) (1)
North Carolina	1909	60, 331	52, 188	1,858	3,272	1,480	1,533
	1908	40, 718	27, 253	6,597	863	3,861	2,144
	1907	94, 846	84, 542	4,618	1,532	1,056	3,098
South Carolina	1909	74,155	53, 149	10,425	7,733	1,751	1,097
	1908	76,763	32, 783	31,117	1,383	5,654	5,826
	1907	113,688	96, 487	12,703	1,240	775	2,483
Tennessee	1909 1908 1907	17,288 24,845 30,341	9,052 5,362 10,508	7,448 16,375 19,282	(1)	480 2,385 346	308 723 205
Texas	1909	217, 161	3,097	78,657	78,516	14,437	42, 454
	1908	209, 283	2,178	90,506	53,669	20,707	42, 223
	1907	120, 469	5,443	47,011	38,011	9,123	20, 881
Virginia	1909 1908 1907	11,553 6,507 18,926	6,494 4,525 9,085	4,418 1,982 9,841	641 (¹)	(¹) _(¹)	(1) (1)
All other states	1909	845, 795	725, 414	96,250	21,622	279	2,230
	1908	583, 386	486, 770	84,767	5,340	2,562	3,947
	1907	899, 656	712, 044	183,257	3,431	195	729

1 Included in "All other states."

It is gratifying to note the large quantity of cotton stored in warehouses, as shown in the statistics of Table 6, if this condition points to a greater regard for the staple and a consequent more careful handling. The increased value of raw cotton in recent years has brought from consumers stringent protests against antiquated methods of caring for the staple. Probably the most important questions in connection with the cotton industry and trade to-day are those of adequate warehousing facilities and of more careful ginning, packing, and hauling. Practically the entire crop is harvested, ginned, and baled within four months, and during this period some 75 per cent of it reaches commercial channels. The deficiency in storage facilities in the cotton-growing states, together with a lack of appreciation on the part of growers, factors, and others, of the necessity of properly caring

for cotton, are the causes of a deplorable condition. Too frequently the producer permits his baled cotton to remain for weeks exposed to the weather or stored under leaking shelters. Being thus careless himself, he naturally makes few requirements of his factor or agent at the shipping centers, into whose hands the cotton subsequently comes. Thus it is that during the months when the movement of the crop is heaviest the streets are frequently made dumping places for baled cotton, and this valuable product is again subjected to the action of sunshine, rain, mud, and dirt, which, with the exposure on the farms just referred to, results in what is commonly termed "country damage." Serious losses are sustained because of these conditions, and it is gratifying that all concerned are beginning to realize the necessity for more careful handling, that well-regulated warehousing is growing in favor, and that the required facilities are increasing.

EXPORTS.

Table 7 shows the quantity of domestic raw cotton exported from the United States, by customs districts, during the years ending August 31, 1906 to 1909.

Table 7.—Exports of domestic raw cotton from the United States, by customs districts: 1906 to 1909.

[Compiled by the Bureau of Statistics, Department of Commerce and Labor, for the year ending August 31.]

ALLEMONIC PROMPTO	EXPORTS (RUNNING BALES).							
CUSTOMS DISTRICT.	1909	1908	1907	1906				
Total	8, 574, 024	7, 573, 349	8, 503, 265	6,763,041				
Bangor, Me. Passamaquoddy, Me. Portland and Falmouth, Me. Boston and Charlestown, Mass. New York, N. Y Philadelphia, Pa. Baltimore, Md. Newport News, Va. Norfolk and Portsmouth, Va. Wilmington, N. C. Charleston, S. C. Savannah, Ga. Brunswick, Ga St. Johns, Fla Fernandina, Fla Key West, Fla Pensacola, Fla Mobile, Ala. Pearl River, Miss. New Orleans, La Sabine, Tex. Galveston, Tex Saluria, Tex Paso del Norte, Tex Paso del Norte, Tex Paso de Santiago, Tex. Porto Rico Arizona San Francisco, Cal Willamette, Oreg. Puget Sound, Wash North and South Dakota Minnesota. Detroit, Mich Huron, Mich	972 6, 503 106, 735 453, 540 69, 639 128, 474 36, 653 403, 209 921, 239 283, 026 200, 221 1, 957, 406 153, 234 3, 175, 890 6, 116 20, 221 1, 957, 406 6, 116 20, 221 2, 405 6, 116 208 499 82, 528 275 670, 170 267 70, 170 24, 444	7, 573, 349 7, 950 7, 950 1156, 780 619, 453 56, 138 117, 932 1, 636 40, 985 492, 830 44, 518 892, 080 176, 015 173, 213 259, 590 1, 870, 700 1, 870, 700 2, 301, 168 462 329 677 117 924 48, 672 1, 050 101, 800 54, 868 23, 542 681 681 757	8,503,265 249 4,591 7,399 156,788 480,470 41,091 165,221 6,140 9,514 317,597 21,429 923,679 141,940 100 1555,691 163,203 2,072,387 13,711 3,448,006 575 16 3 83,123 1,001 146,645 4,232 4,232 1,901 146,645 4,232 338 8,804 19,574 3388,804 19,574 3388,804	6,763,041 1,982 5,763 1,880 147,030 147,030 150,024 39,886 156,178 7,183 27,239 320,083 9,900 970,002 148,551 674 2 176,277 140,301 1,570,844 (1) 2,269,029 3,529 150 5,831 168 38,392 4,849 65,022 5,839 25 73,902 20,474 2266				
Niagara, N. Y Buffalo Creek, N. Y Cape Vincent, N. Y Champlain, N. Y Oswegatchie, N. Y Vermont, Vt Memphremagog, Vt	1,438 10 1,280 3,150 2,725 20,245	12 1,006 337 6,851 10,469	18 10,509 3,667 2,854 11,967	18 6,011 952 4,717 9,077				

¹ Included with exports from Galveston prior to March 1, 1907.

The exports of domestic raw cotton from the United States in 1909 exceeded those for 1908 by almost exactly 1,000,000 bales, and was practically the same as

that for 1907. Only 12 per cent of the cotton exported for 1909 is credited to ports outside of the cotton-growing states, while that exported from the ports of Galveston, New Orleans, and Savannah represented more than two-thirds of the total. The exports from Galveston alone amounted to 37 per cent of the total for the country.

Receipts of cotton, by ports.—In connection with the figures given in Table 7, showing the exports of domestic raw cotton, by customs districts, it is interesting to observe the development of the different ports and the drift of the cotton trade through them, which are brought out in the statistics of net receipts for selected ports given in Table 8.

TABLE 8.—NET RECEIPTS OF COTTON AT SELECTED PORTS: 1875 TO 1909.

[Compiled from Commerce and Finance of the United States. The figures are for the year ending August 31.]

PORT.		NET RECEIPTS OF COTTON (RUNNING BALES).												
PORT.	1900	1908	1907	1906	1905	1900	1895	1890	1885	1880	1875			
Galveston New Orleans Mobile Pensacola Brunswick	3,657,156 2,093,232 393,911 166,616 325,127	2, 633, 429 1, 995, 204 1 516, 321 (2) 214, 496	3,891,695 2,296,971 260,300 149,639 163,928	2,656,600 1,653,142 250,350 166,075 180,853	2,879,336 2,689,520 329,556 195,151 199,193	1,710,263 1,867,153 1340,646 (2) 94,278	1,659,999° 2,584,115 253,187 (3) (3)	860,112 1,973,571 261,957 (3) (3)	463, 463 1, 529, 592 237, 071 (8) (3)	480,352 1,504,654 358,971 (3) (3)	354, 927 993, 481 320, 822 (3) (3)			
Savannah	210,574 409,656	1,531,502 203,491 501,483 578,151	1,468,633 149,924 322,668 642,895	1,514,953 180,604 325,818 683,661	1,877,343 225,366 375,383 841,174	1,088,807 265,523 282,360 432,727	944, 410 425, 487 234, 621 472, 540	956, 517 327, 079 134, 916 404, 056	728,087 507,802 94,054 545,418	741,018 464,332 78,876 590,032	606,727 412,931 76,601 387,279			
Baltimore. Philadelphia New York. Boston.	6.848	89, 735 9, 803 4, 228 15, 822	70,825 11,021 23,108 72,655	68,067 10,317 6,575 63,828	72, 427 13, 645 33, 798 83, 644	101,648 36,238 119,215 118,891	(3) (3) 187, 794 (3)	(3) (3) 176, 502 (3)	(3) (3) 99, 200 (3)	(3) (3) 229, 426 (3)	(3) (3) 179,163 (3)			

¹ Includes receipts of Pensacola.

One of the most striking features of the statistics presented in Table 8 is the remarkable increase in the net receipts of cotton at the Gulf ports. For instance, the receipts at Galveston and New Orleans have increased steadily and rapidly since 1875, the increase in the combined receipts of these two ports for 1909 over those for 1875 amounting to 4,401,980 bales. This remarkable development is to be attributed to the large increase in cotton growing in the states of Texas and Oklahoma, which have transportation connections centering in these ports. It may be noted that the cotton crop of Texas in 1879 was only 805,284 commercial bales, compared with 3,724,575 bales in 1908 and 4,066,472 bales in 1906.

Another noteworthy feature of the statistics in the above table is the drift of the cotton trade in respect to certain of the Atlantic ports. Charleston shows 412,931 bales in 1875 and 507,802 bales in 1885, but in 1909 the receipts were only 210,574 bales; on the other hand, Wilmington increased gradually from 76,601 bales in 1875 to 409,656 bales in 1909. The receipts at Norfolk have nearly doubled, while those

of Savannah have more than doubled during the period covered by the table. These conditions have been brought about largely by the trend in the development of the interior transportation facilities and by the establishment of new ocean-transportation routes.

It may be interesting in this connection to observe that the average ocean-freight rate from the United States to Liverpool, according to the statistics published by the Department of Agriculture, is 32 cents per 100 pounds, the average railway rate from the local shipping point to all ports 40 cents, and the average cost of transportation from the farm to the shipping point 16 cents, which gives an estimated total freight charge from the hands of the producer to the cotton merchant in Liverpool, not including terminal charges, of 88 cents for 100 pounds, or \$4.40 per 500-pound bale.

Exports of cotton, by countries.—The following table shows the exports of domestic raw cotton, from 1821 to 1909, by countries to which exported, together with the total value:

² Included in receipts of Mobile.

⁸ Not shown separately.

Table 9.—EXPORTS OF DOMESTIC COTTON—TOTAL VALUE AND QUANTITY—BY COUNTRIES TO WHICH EXPORTED: 1821 TO 1909.

[Compiled from Commerce and Navigation of the United States. The statistics of exports differ slightly since 1865 from those shown in Table 15 because of a difference in years to which they relate. The figures of this table are for fiscal years.]

· · ·	Ī				en they rele			Y, IN 500-								
YEAR.	Total value.	Total.	United Kingdom.	Germany.	France.	Italy.	Spain.	Belgium.	Russia.	Aus- tria- Hun- gary.	Nether- lands.	All other Europe.	Japan.	Canada.	Mexico.	All other countries.
1909	\$419,733,103 437,788,202 481,277,797 401,005,921 379,965,014	8,895,970 7,633,997 9,036,434 7,268,090 8,609,698	3, 665, 355 2, 956, 352 3, 966, 119 3, 181, 143 3, 967, 254	2, 438, 090 2, 385, 663 2, 315, 651 1, 871, 441 2, 011, 679	1, 098, 173 889, 083 1, 006, 633 817, 583 818, 304	505, 695 418, 921 567, 916 486, 607 534, 735	301, 789 262, 744 275, 868 241, 747 295, 537	157, 631 119, 470 154, 168 114, 673 145, 564	96,675 98,371 121,141 112,480 129,060	94,782 90,049 113,630 56,375 62,572	30,129 27,684 29,092 18,490 31,163	58, 174 62, 125 65, 083 44, 486 72, 911	208, 943 200, 396 262, 283 147, 269 336, 575	131,453 113,997 150,343 141,908 115,857	42,575 4,767 732 29,285 79,082	6,506 4,375 7,775 4,603 9,405
1904 1903 1902 1901	370, 811, 246 316, 180, 429 290, 651, 819 313, 673, 443 241, 832, 737	6,126,386 7,086,086 7,001,558 6,661,781 6,201,166	2,475,752 2,799,096 3,132,324 3,106,857 2,302,128	1,797,354 1,915,094 1,705,815 1,629,935 1,619,173	734, 286 806, 673 775, 773 754, 329 736, 092	363,295 444,950 445,437 365,359 443,951	184,862 266,336 270,602 237,346 246,612	105,213 157,351 132,232 154,682 148,319	168,506 181,938 73,446 53,171 54,950	28,158 39,912 39,757 37,238 44,919	16,055 42,542 22,418 53,180 74,635	61, 488 82, 243 61, 679 52, 325 65, 635	45,870 152,826 178,505 78,558 323,202	88,795 127,640 129,016 102,980 109,983		2,978 7,054 718 13,045
1899 1898 1897 1896	209, 564, 774 230, 442, 215 230, 890, 971 190, 056, 460 204, 900, 990	7,546,821 7,700,529 6,207,510 4,670,453 7,034,866	3,609,444 3,532,101 3,127,186 2,267,222 3,553,782	1,728,975 1,858,525 1,371,577 1,038,457 1,504,631	803, 406 842, 038 716, 025 478, 265 790, 699	417, 353 387, 581 323, 117 261, 644 332, 656	248, 635 263, 648 219, 088 216, 178 255, 679	129, 524 161, 941 83, 485 87, 966 145, 340 128, 907	95,012 103,825 84,570 91,622 141,998 140,082	57,127 35,614 23,971 15,912 24,852 960	51, 621 43, 509 34, 731 14, 219 25, 999 18, 581	84,500 69,189 48,790 51,367 55,319 39,686	182,734 224,214 64,022 40,388 22,130 9,603	98, 230 122, 495 80, 408 68, 074 105, 534 65, 085	36,130 42,433 30,207 38,817 75,953 35,165	4, 130 13, 416 333 322 294 270
1894	210, 869, 289 188, 771, 445 258, 461, 241 230, 712, 898 250, 968, 792	5,366,565 4,424,230 5,870,440 5,814,718 4,943,600	2,970,903 2,363,176 3,381,685 3,401,212 2,905,152	909,389 850,387 964,883 1,019,144 837,641	610, 854 568, 059 692, 785 553, 100 484, 759	211,716 160,019 171,003 194,022 129,751 131,068	225, 364 200, 212 187, 458 218, 836 175, 339 181, 533	90, 309 134, 373 97, 423 93, 588 147, 807	36, 356 134, 392 135, 611 193, 163	10,052 4,447 300 5,610	26, 614 27, 925 43, 669 17, 438 44, 354	22, 449 38, 996 47, 478 19, 927	1,586 3,149 4,813	62, 988 79, 228 69, 261 58, 473 61, 143	41,812 44,235 25,682 26,095 33,802	173 276 20 1,974 263
1889 1888 1887 1886 1885	237, 775, 270 223, 016, 760 200, 222, 057 205, 085, 642 201, 962, 458	4,769,633 4,528,242 4,338,915 4,116,075 3,783,319	2,940,800 2,838,525 2,713,515 2,444,482 2,419,834	660,756 560,624 561,664 569,435 468,987 363,055	400, 197 392, 197 466, 090 401, 643 361, 462 457, 369	131,008 110,375 73,222 110,473 79,041 51,725	169, 331 138, 499 168, 414 135, 319	130,791 110,288 125,069 85,664 30,863	216, 798 151, 267 184, 924 135, 131 193, 639	5,252 3,898 1,762	27,725 43,735 31,672 37,930 53,913	18, 258 20, 519 16, 053 17, 750 11, 027		52,052 47,904 37,425 26,398 19,216	11,414 11,951 21,035 11,754 22,368	152 261 198 151 26
1884	197, 015, 204 247, 328, 721 189, 812, 644 247, 695, 746 211, 535, 905 162, 304, 250	3,725,145 4,576,150 3,479,952 4,381,857 3,644,122	2,384,254 2,776,411 2,361,793 2,729,672 2,433,255 1,967,549	538, 583 324, 962 466, 192 308, 045	428, 829 333, 541 553, 854 359, 693 393, 977	80, 607 44, 073 75, 145 59, 126 47, 617	196, 939 115, 264 127, 741 133, 373 141, 215	42,055 4,732 18,318 17,896 19,127	347, 354 184, 233 267, 714 204, 500 308, 647	4,656 189 4,218 1,699 2,533 3,636	57,610 33,820 67,502 65,325 51,734	28, 780 16, 706 18, 211 21, 097 13, 280		32, 636 35, 159 25, 960 19, 619 15, 481	41, 155 25, 075 26, 772 19, 763 19, 796	535 405 558 231 821
1879	102, 304, 230 180, 031, 484 171, 118, 508 192, 659, 262 190, 638, 625	3,256,746 3,215,067 2,890,738 2,982,811 2,520,838	2,079,897 2,040,731 1,914,660 1,823,884 1,807,144	243,298 155,211 217,092 150,570 229,227	472,062 488,178 407,952 310,279 354,731	36, 221 23, 096 46, 759 18, 084 24, 597	81, 371 92, 061 95, 122 59, 627 106, 718	28, 383 4, 597 31, 076 6, 227 17, 107	170, 858 50, 219 161, 794 131, 417 108, 181		55,909 53,711 68,532 8,141 38,009	22, 413 13, 202 15, 019 2, 876 18, 041		14,165 11,017 9,961 7,123 8,022	6,844 7,940 13,945 2,610 4,579	10 775 899 849 56
1874 1873 1872 1871 1870	211, 223, 580 227, 243, 069 180, 684, 595 218, 327, 109 227, 027, 624 162, 033, 052	2,717,205 2,400,127 1,867,075 2,925,856 1,317,117 1,288,656	1,717,299 1,407,830 2,204,645 1,298,332 873,087	190, 685 85, 033 207, 972 173, 552 140, 855	226, 740 176, 374 119, 223 306, 293 201, 116	30, 568 11, 845 42, 915 14, 549 8, 956	55, 444 65, 142 94, 312 55, 409 32, 317	24, 253 20, 197 35, 867 3, 452	99, 147 49, 367 62, 271 30, 341 19, 525		38, 172 45, 570 111, 405 17, 050 5, 331	10,916 1 14,220 1,621 536		2, 988 3, 792 4, 786 3, 122 2, 244 2, 091	1,101 1,914 22,619 13,219 4,084 16,457	10 1,291 177 231 126
1869 1868 1867 1866 1865	152, 820, 733 201, 470, 423 281, 385, 223 6, 836, 500 9, 895, 854	1,569,527 1,322,947 1,301,146 13,214 23,988	1,129,030 1,048,641 1,024,728 12,009 19,302	152,643 56,396 32,276 283 47	186,466 167,858 216,470 714 3,557	12,066 7,223 397	51, 241 22, 068 17, 631	1,608 1,775 653	11,748 10,179 5,372	331	5,045 514 283	675 214 1,107		1,288 1,643 184 110 303	6,622 101	169 485 24 20 226
1864 1863 1862 1861 1860	6, 652, 405 1, 180, 113 34, 051, 483 101, 806, 555 161, 434, 923	22,770 10,129 615,032 3,535,373 2,772,937	19,681 7,091 414,685 2,528,274 1,887,372	17 23,798 132,145 131,362	2,534 46 114,541 567,935 372,981	1,688 9,373 54,037 42,977	1,106 22,310 88,044 121,046	11, 364 29, 601 28, 657	8, 502 43, 396 87, 240 64, 220	14,943 33,113	5,301 25,515 32,311 16,995	22.690		115 303 2,771 114 261	2, 821 18, 087 11, 987 18, 169	267 612 1,087
1859	131, 386, 661 131, 575, 859 128, 382, 351 88, 143, 844 93, 596, 220	2,237,248 2,096,565 2,702,863 2,016,849 1,975,666	1,501,905 1,367,996 1,708,656 1,346,997 1,392,494 1,537,193	58, 872 89, 866 124, 219 61, 642 75, 440	357,580 348,469 443,535 420,228 288,857	38, 996 34, 480 41, 710 49, 787 25, 452	79, 261 91, 114 116, 959 66, 143 70, 048	18,691 24,495 46,343 24,439 27,961 30,989	63, 867 9, 287 898 5, 830 42, 573	13,960 15,229 37,306 1,910 29,922 35,937	20, 869 26, 193 9, 883 12, 096 14, 078	38, 194 18, 083		1,715 8,317 1,766 145 24	15, 917 12, 021 15, 054 24, 292 14, 928	123 19 1,540 544
	93, 596, 220 109, 456, 404 87, 965, 732 112, 315, 317 71, 984, 616	2, 223, 141 2, 186, 461 1, 854, 474	1,505,148 1,341,290 863,062 1,478,690	46, 280 44, 277 34, 480 10, 090 27, 689	378, 454 372, 428 278, 329 251, 668 302, 680	34,976 35,868 20,641 13,707 33,316	73, 702 58, 604 68, 545 55, 353 46, 572	50, 989 54, 316 32, 670 25, 492 56, 227 30, 559	20, 950 20, 197 8, 677 21, 301 20, 534	47,897 34,618 18,492 26,559 40,868 23,561	20,518 11,018 8,590	10,639 7,532 26,003 10,129		33 47 89 194 45	13, 400 1, 692 2, 627 4, 437	626 308 384 5, 761 9, 204
1848	63,870,307	1,628,549 1,054,440 1,095,116 1,745,812 1,327,267	1,144,006 702,538 692,317 1,210,290 973,459	35,074 21,779 15,391 34,605 12,579	272,596 204,235 264,106 295,659 240,120 273,629	17, 184 26, 431 28, 620 13, 714 6, 346 18, 371	38, 647 24, 627 235 673 8, 249	20, 369 14, 817 28, 595 19, 771 30, 287	11, 237 8, 585 14, 991 5, 536 6, 858	26, 764 41, 786 24, 456 12, 032	23, 775 9, 703 3, 957 7, 700 25, 099 6, 155 16, 348	7, 324 7, 887 2, 610 808		208 95 166 2,797	3,323	8, 221 20, 377 69, 024 13, 291 22, 702 16, 448
1843. 1842. 1841. 1840.	63,870,307	1,584,594 1,169,434 1,060,408 1,487,882 827,248	1,169,691 757,395 696,613 989,830 621,548	30, 507 19, 525 12, 992 18, 317 1, 780 9, 437	311,643 278,790 358,180 179,565	8,817 3,738 7,805 10 460	36 1,049 1,179 5,663	16, 455 19, 632 25, 780	5,668 1,972 4,406 4,209 5,577	14,187 16,263 26,336 4,741 11,314	16,783 5,270 21,698 3,731 15,291	2,477 4,194 5,160 3,270 3,069		36 553 59	112	20, 355 29, 262 4, 504 5, 199
1838	00,010,007	1,191,905 888,423 847,263 774,718 769,436	883,716 643,159 585,038 540,169 569,448	7,530 14,130 5,414 13 235	240, 649 198, 617 202, 727 200, 994 159, 897 153, 666	1,107 322 26 382	4, 665 3, 252 1, 756 1, 786 1, 516	2,711 11,405 3,539 7,960 2,818 2,410 2,619	1,995 2,833 1,950 2,521 2,895	16,860 13,925 9,886 7,611 2,215	4, 345 8, 841 8, 555 9, 848 2, 727	3,609 6,867 1,963 2,128 2,788		16 22 26 18 36	14 14 296	2,977 1,332 1,161 152 404 945
1832 1831 1830 1829	29, 674, 883	649, 397 644, 430 553, 960 596, 918 529, 674	476, 484 458, 015 441, 634 419, 661 349, 120	3, 751 8, 150 4, 834 2, 246 13, 746 6, 782	153,000 154,935 92,257 150,212 134,408 106,962	1,162 612 471 2,113 814	4, 568 1, 111 64	(1)	1,678 1,524 223 456 1,300 294	3,309 5,558 5,629 8,142 1,961	27,840 1,945 17,135 19,196 7,502	3,738 1,257 1,949 1,853		72 678 19 21 33 70		523 248 248
1827 1826 1825 1824	29, 074, 883	421,181 588,620 409,071 352,900 286,739	293, 666 425, 415 267, 758 287, 426 202, 421 280, 368	6, 782 6, 797 4, 121 1, 154 590 4, 717	100, 502 140, 848 124, 337 60, 008 81, 396 49, 987	296	16		31 268 1,003 619	366 67 356	9,185 2,840 866 9,301	2,545 2,872 1,135 402 1,455		65 14 41 192	44	635 9 20 13 1,117
1822 1821		347, 447 289, 350 249, 787	280, 368 228, 928 175, 438	5, 911 1, 496	43, 016 54, 878	3,913 1,796	1		1,428	420 70	3,941 8,372	2,188		,		4,370

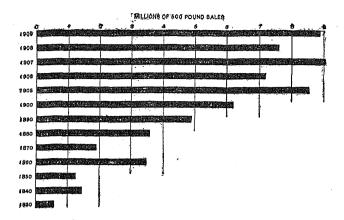
Table 9 shows the development in the exports of raw cotton, and is very instructive, as it covers practically the entire period during which cotton has been produced in this country for commercial purposes. The statistics in this table are not comparable with those in Table 7, because of a difference in the year and in the bale unit employed. The quantity exported during the fiscal year ending June 30, 1909, amounted to 8,895,970 bales of 500 pounds each, with a value of \$419,733,103. Of this cotton, 3,665,355 bales, or 41.2 per cent, went to the United Kingdom; 2,438,090 bales, or 27.4 per cent, to Germany; and 1,098,173 bales, or 12.3 per cent, to France. These three countries took 80.9 per cent of the total quantity exported.

The table does not in all instances show the final destination of American cotton exported, because of the present indirect transportation connections—cotton shipments from the United States, in many instances, being consigned to intermediate points and thence transported to the place of ultimate destination.

During the period covered by this table the exports of raw cotton increased from less than 250,000 bales of 500 pounds each to 9,036,434 bales reported in 1907 and 8,895,970 bales in 1909. An interesting feature of the table is the general distribution and development of the export trade since 1880, at which time the United Kingdom took two-thirds of all the American cotton exported, France one-tenth, and Germany onetwelfth; while during the year ending June 30, 1909, the United Kingdom took about two-fifths, Germany one-fourth, and France one-eighth. Between 1880 and 1909 the exports to the United Kingdom increased about 50 per cent, those to Germany nearly 700 per cent, while those to France more than trebled. The exports to Italy since 1880 increased from 59,126 bales to 565,695 bales, or more than ninefold. Exports to Japan are noteworthy because of the remarkable variations in the quantities for the different years and because of the growth of these exports since 1891, which is the first year for which they are shown in the table. For 1909 they amounted to 208,943 bales, while for 1905 they were 336,575 bales. The exports to Canada amounted to 19,619 bales in 1880 and 131,453 in 1909. Russia and the Netherlands both show decreases during this period, the former from 204,500 bales to 96,675 bales and the latter from 65,325 bales to 30,129 bales. The decrease in the exports to Russia may be accounted for partially by the increased production of cotton in Russian territory and to the importation of Persian cotton.

The development of the export trade in domestic raw cotton is graphically illustrated by the following diagram:

DIAGRAM 2.—Exports of domestic cotton for specified years: 1830 to 1909.



Exports of sea-island cotton.—Because of the great interest that attaches to sea-island cotton, which is quite out of proportion to the volume of its production, and which is brought about by its special use in the manufacture of sewing thread and laces and for similar purposes requiring an extra long fiber, the available statistics of exports of this cotton are presented in Tables 10 and 11, the former showing the exports of sea-island cotton for selected years since 1885, by countries to which exported, and the latter the yearly exports of this cotton since 1805. It will be understood, of course, that the statistics given in these tables are included in the general statistics of domestic exports of cotton shown in other tables of this report.

Table 10.—Exports of sea-island cotton (500-pound bales), by countries to which exported: 1885 to 1909.

[The figures are for the year ending June 30.]

Year.	Total.	United King- dom.	France.	Ger- many.	All other countries.
1909. 1908. 1907. 1906. 1900. 1890. 1896. 1896.	19, 482 25, 399 15, 212 32, 492 36, 400 30, 523 18, 442 13, 528	13,589 17,874 11,056 23,870 30,331 26,350 16,853 11,950	5,070 7,112 3,925 6,787 5,193 3,878 1,420 1,560	426 413 185 838 796 36 169 13	397 46 997 80 259

The production of sea-island cotton in 1908, according to returns of ginners, was 93,858 bales, equivalent to 36,538,239 pounds. Nearly 27 per cent of the crop of 1908 was exported, as compared with 38 per cent of the crop of 1907 and 34 per cent of that for 1906. The United Kingdom takes more than two-thirds of the entire amount exported and France most of the remainder. It is noteworthy that the quantity of sea-island cotton exported in 1805 was only about 1,000,000 pounds less than in 1909.

Table 11.—QUANTITY, VALUE, AND PRICE PER POUND OF SEA-ISLAND COTTON EXPORTED FROM THE UNITED STATES: 1805 TO 1909.

[Compiled by the Bureau of Statistics, Department of Commerce and Labor. From 1887 to 1909 the statistics relate to the year ending August 31; prior to 1887 to the fiscal year ending June 30.]

YEAR.	Bales.	Quantity (pounds).	Value.	Average price per pound (cents).	YEAR.	Bales.	Quantity (pounds).	Value.	Average price per pound (cents).
09	26,141	9,827,034	\$2,054,667	20.8	1856		12,797,225		
08	33,286	12,793,166	3,370,025	26.3	1855		13,058,590		
07		7,625,985	2,082,606	27.3	1854		10, 486, 423		
06	41,111	15, 812, 223	3,240,505	20.5	1853		11,165,165		
05	40,376	15, 906, 269	3,223,271 2,889,827	$20.3 \\ 22.7$	1852		11,738,075		
03		12,750,616 21,555,348	2,889,827 4,481,153	20.8	1851 1850		8, 299, 656 8, 236, 463		
02		12,072,090	2,453,722	20.3	1849		11,969,259		
01	31, 688	12,380,234	2,383,589	19.3	1848		7,724,148		
00	46, 117	18, 124, 726	2,973,935	16.4	1847		6, 293, 973		
99	33,922	13, 294, 378	2,216,234	16.7	1846		9, 388, 533		
98	41,778	16, 261, 806	2,875,741	17.7	1845		9,389,625		
97	55,824	21,751,255	4,104,819	19.0	1844		6,099,076		
96	49,811	19, 228, 199	3,831,852	18.9	1843		7,515,079		
95 94	39, 250 36, 095	15, 227, 676 13, 830, 942	2,773,610 2,818,397	18.2 20.4	1842		7,254,099		
93	20, 841	8,033,070	1,770,723	22.0	1840.		8, 779, 669		
92	23, 381	9,278,332	1,630,020	17.6	1839		5, 107, 404		
91	38, 204	14,766,245	3,105,707	21.0	1838		7, 286, 340	1	
90	24, 467	9,284,294	2,289,037	24.7	1837		5,286,971		26.
89	17,089	6,299,668	1,367,099	21.7	1836		8,544,419		. 25.
88	19,935	7,051,762	1,668,208	23.9	1835		7, 752, 736	· · · · · · · · · · · · · · · · · · ·	. 24.
87	21,829	7,953,972	1,787,188	22.5	1834		8,085,935		.] 19.
86		4,613,675	1,176,025	25.5	1833		11,142,987		16.
85		6,764,033	1,685,635	24.9	1832		8,743,373		. 13.
84	11,094 17,166	3,598,866	1,160,673 1,662,281	32.3 29.2	1831 1830		8,311,762 8,147,165		13. 16.
82	13, 975	5,692,079 4,853,592	1,398,296	28.8	1829		12,833,307		15.
81	20, 560	7,138,351	2,161,207	30.3	1828		11, 288, 419		16.
80		5,061,634	1,683,900	33.0	1827				14.
79	11, 461	4,030,228	1,108,072	27.5	1826.		5,972,852		20.
78	16,455	6, 325, 147	1,616,214	25.6	1825		9,655,278		. 28.
77	9,863	3,394,724	1,084,509	31.9	1824		9, 525, 722	:	19.
76	8,204	2,644,791	941,803	35.6	1823		12, 136, 688		17.
75	12,647	4, 439, 120	1,538,769	34.7	1822		11, 250, 635		19. 21.
74 73	19,290	6, 426, 524	2,114,124 2,350,687	32.9	1821 1820.		11,344,066 6,020,101		
72	16,463 8,029	5,693,909 2,709,106	1,410,303	41.3 52.1	1819		3, 442, 186		
71	9,663	3,212,988	1,437,539	44.7	1818		3,080,838		
70	17, 341	5, 409, 780	2, 906, 433	53.7	1817		8, 101, 880		
69	11,011	2,785,244	2,374,892	85.3	1816		9,900,326		
68		4,998,315	3,023,334	60.5	1815		8,449,951		
67		6,742,314	4,354,841	64.6	1814		2,520,388		
66		7, 284, 473	6, 424, 770	88.0	1813		4, 134, 849		
65		330,584	296, 179	98.5	1812		4, 367, 806		
64		133,521	127, 783	95.7	1811		8,029,576		
63	· · · · · · .	527,747			1810		8,604,078		
62		66,443			1809. 1808.		8, 664, 213 949, 051		
60	• • • • • • •	6,170,321 15,598,698			1807		8,926,011		
59	• • • • • • • • •	13,713,556			1806		6,096,082		
58		12, 101, 058			1805		8, 787, 659		
57		12,940,725					5,101,000		

EXPORTS AND IMPORTS OF COTTON MANUFACTURES.

The following table distributes the exports of domestic manufactures of cotton for the last fiscal year, by countries to which exported:

TABLE 12.—EXPORTS OF DOMESTIC MANUFACTURES OF COTTON, BY COUNTRIES TO WHICH EXPORTED, FOR THE YEAR ENDING JUNE 30, 1909.

[Compiled by the Bureau of Statistics, Department of Commerce and Labor.]

			implied by th	E Durchu or		- Optar union u	of Commerce		Victoria de la companya de la compa			
•				CLO	reis.				COTTON	WASTE.		
COUNTRY.	Total value.	Unble	nched.	Bleac	ehed.	Dyed, co pri	lored, or nted.	Wearing apparel (value).	Pounds.	Value.	Yarn and thread (value).	All other (value).
*		Square yards.	Value.	Square yards.	Value.	Square yards.	Value.					
Total	\$31,878,566	208, 383, 337	\$12,381,384	37,739,860	\$2,146,117	121, 508, 345	\$7,165,579	\$4,240,667	41,842,800	\$ 2,134,941	\$551,062	\$ 3,252,816
Europe: United Kingdom	2,092,212 1,035,235	2,091,702 10,781	360,895 4,214	36,277 1,000	5,898 86	336,875 17,093	33,015 1,227	706,290 122,048	10,695,966 19,642,728	681,152 880,545	15,933	289,029 27,115
Germany Turkey (including Asiatic Turkey) Belgium Italy	288,735 91,117 64,938	3,832,628 2,725 32,194	248,899 525 2,625	84,426	6,321	364, 448 21, 443	30,230 1,019	1,744 2,658 6,225	2,570,488 626,553	80,668 45,208		1,541 7,266 9,861
Netherlands	61,632 82,290	9,241	2,052 1,763	500	50	5,005 5,694	558 613	46,339 3,161 1,993	496,601 749,634	11,249 63,993	135	1,857 14,528 2,383 3,319
Norway Portugal Russia (including Asiatic Russia)	17,072 42,720	80,801 6,209	12,576 2,193			3,412 12,576	370 1,173	807 1,028	100	9		38,319
Denmark Spain	14 427	8,780 1,240	1,674 115			530	60	$2,159 \\ 1,052$	425, 458 167, 843	8,689 13,610	305	1,450 1,359
Sweden	16, 136 7, 690 45, 483	1,353 424,503	2,782 32,805	9,600	702	20,041	1,492	2,148 3,774	11,154	700		1,359 2,760 6,010
America: Canada	3,712,506 646,488 774,266 453,136 374,183	1,286,660 246,515 249,393 6,668,007 1,449,188	109,706 40,888 33,587 289,954 63,550	2,051,370 466,857 384,992 156,513 426,622	190,694 41,409 31,466 11,586 27,344	4,450,587 1,126,929 3,709,328 2,893,685 3,098,159	436,938 86,675 217,484 144,389 168,016	1,108,298 246,228 386,084 1,129 34,424	4,862,701 178,521 372,679 1,677 4,892	250, 514 10, 064 20, 830 114 250	178,572 7,717 2,346 346	1,437,784 213,507 82,400 5,618 80,590
Guatemala Nicaragua Costa Rica British Honduras Cuba	1	1,298,087 479,564 1,447,429 167,971 2,439,815	66,557 21,776 66,166 13,375 241,728	176, 384 308, 310 40, 304 152, 957 5, 284, 182	11,236 21,321 2,817 10,276 202,116	2,454,044 2,200,565 2,922,371 830,309 13,326,459	144, 168 129, 142 141, 206 48, 654 739, 546	15,324 30,045 15,902 18,174 330,685	14,524 6,765 22,449 7,692 465,841	861 412 1,266 438 27,204	511 35 2, 252	29, 283 25, 350 12, 494 27, 005 273, 433
Haiti	1,258,197 503,271 911,275	1,275,631 743,267 1,701,780	73,686 30,134 108,412	1,145,537 827,566 2,048,347	64,822 48,057 90,193	17,301,015 6,337,393 10,802,519	1,100,180 375,868 568,711	3,897 23,480 101,152	8,507 26,291 23,030	019 1,518 1,581	4,006 257	5,930 11,208 40,969
quelon) Danish West Indies	44,616 25,220	146,910 32,604	12,046 2,454	19,947 1,371	1,189 133	407,658 188,845	24,078 10,973	3,906 7,561	12,478 9,299	788 580	39	2,549 3,480
French West Indies Bermuda Chile Colombia Brazil	6,074 39,601 490,016 823,216 205,177	8,836 16,773 1,383,034 2,365,791 110,019	1,171 $1,711$ $82,264$ $107,740$ $17,717$	118 31,319 4,745,676 902,371 88,672	2,819 2,819 259,793 43,942 10,508	46,196 125,613 2,293,041 12,658,345 2,254,769	2,871 8,021 123,483 612,060 161,090	951 19,877 5,436 23,145 14,037	3,312 1,757 7,284 16,938 66,989	236 141 653 1,036 4,626	223 0,858 9,700 2,382	835 6,809 11,529 25,587 54,817
Argentina. Venezuela. Guiana. Uruguay.	457, 436 346, 443 150, 581 97, 134	1, 126, 428 1, 987, 017 295, 426 487, 380	$\begin{array}{c} 133,014 \\ \cdot 122,178 \\ 20,121 \\ 60,340 \end{array}$	38,526 177,382 162,171 119,561	4,012 9,595 10,518 8,524	345, 363 3, 725, 349 2, 014, 973 71, 750	27,283 201,473 105,796 5,863	8,379 1,583 6,497 8,034	24,339 18,882 765	1,570 1,295 60	247,806 3,890	35, 372 10, 319 7, 589 10, 483
Peru Ecuador Bolivia Paraguay	104,760 131,689 167,951 500	799,214 144,736 2,749,340	54, 421 13, 304 132, 349	$117,637 \\ 26,435 \\ 7,043$	6,493 1,613 535	434,172 2,163,122 542,172 10,856	31,089 105,491 33,265 450	7,259 4,886 1,294	6,837 30,716 205 465	2,431 2,472 14 50	197	4,870 3,923 494
Asia and Oceania: China. Aden	8,067,472 1,312,265	120,952,947 26,976,950	6, 984, 078 1, 312, 265	17, 415, 127	908,681	1,620,490	111,402	40,108			7,749	15, 454
British India Japan	1,312,265 760,677 46,990	11,523,413 10,487	755,815 2,018	46,815	4,697	33,859	3,957	2, 539 14, 635	15,553	1,339	1,190	2,323 19,154
Hongkong Australasia and Tasmania	189,320 979,440	611,082 1,307,722	73,450 104,424	35,310	3,885	203,790 5,887,943	23,485 476,291	32,753 252,911	91,538	4,655	51,904 6,516	7,737 130,758
Philippine Islands. All other Asia and Oceania	979, 440 1, 059, 042 368, 705	123,906	13,646	15,148	3,885 1,177 1,474	5,887,943 11,650,758 1,352,284	476, 291 520, 816 127, 799	252, 911 322, 184 105, 343	152,849 500	13,451 50	40	187,728 39,520
Africa: British East Africa. British South Africa All other Africa	375, 498 157, 283 149, 966	6,634,970 18,745 1,840,260	330, 544 5, 137 103, 015	34,000 138,603	2,442 7,683	809,140 108,595 317,873	41,852 10,266 16,691	136, 272 9, 367				158 5,608 13,210

As shown in Table 12, the total value of exports of cotton goods of domestic manufacture for 1909 amounted to \$31,878,566, compared with \$25,177,758 in 1908 and \$32,305,412 in 1907. Practically the entire increase over 1908 is due to the larger exports to China and to other eastern countries. Of the total for the year, \$12,381,384 represented the value of unbleached cloths, \$2,146,117 the value of bleached cloths, and \$7,165,579 the value of dyed, colored, or printed cloths. Of the total value of cotton manufactures exported, \$3,866,439 went to Europe, \$14,545,460 to North and South America, \$12,783,920 to Asia, and the remainder to Africa. The export of American

yarns to the Far East is insignificant, that market being controlled by British India and Japan. China is a large importer of yarns, but imported from the United States in 1909 only \$7,749 worth, although the value of yarn exported to Hongkong amounted to \$51,904. Argentina, with an importation valued at \$247,806, and Canada, with one valued at \$178,572, take more than three-fourths of all the yarn exported from this country.

The imports of cotton manufactures into the United States for the year ending June 30, 1909, by countries from which imported, are shown in the following table:

TABLE 13.—IMPORTS OF COTTON MANUFACTURES, BY COUNTRIES FROM WHICH IMPORTED, FOR THE YEAR ENDING JUNE 30, 1909.

	8.			CLOT	HS.			Clothing,					
COUNTRY.	Total value.	Bleached prin	, dyed, or ted.	Not bl dyed, no	eached, r printed.	Plushes velvete	, velvets, ens, etc.	ready- made, and other wearing	Hosiery and knit goods (value).	Laces, embroid- eries, etc. (value).	THREAD,	YARN, AND JARPS.	All other (value).
		Square yards.	Value.	Square yards.	Value.	Square yards.	Value.	apparel (value).	(1000)	(13,00)	Pounds.	Value.	
Total	\$62,010,286	65,841,357	\$9,900,294	2, 535, 251	\$289,843	1,042,739	\$423,161	\$2,719,431	\$6,917,828	\$34,368,580	6,926,295	\$3,306,172	\$4,084,977
Europe: United Kingdom Germany France Switzerland Belgium Austria-Hungary	19,951,548 14,859,770 11,959,565 13,533,057 558,974 490,658	53,763,485 2,422,004 3,663,348 2,366,615 341,159 2,245,427	7,866,571 427,150 783,780 322,698 57,330 303,972	2,038,433 237,165 92,271 139,895 89 15,075	232,072 24,307 11,818 17,375 10 2,631	634, 094 260, 332 145, 143 1, 981 196	207,136 131,018 83,332 1,004 125	188, 417 1,340,315 987,259 12,056 71,196 17,921	120, 097 6, 408, 538 159, 804 200, 775 2, 309 971	6,910,839 4,964,489 9,125,671 12,591,620 354,158 107,613	5,617,301 916,482 86,720 285,854 13,262 4,504	2,746,870 383,421 35,998 127,841 5,097 6,048	1,679,546 1,180,532 771,903 260,692 67,870 51,377
Italy Spain Netherlands Turkey (including	66,399 49,027 47,745	63,775 96,526 31,214	10,581 20,746 5,552			241 547	126 146	6,478 13,631 942	6, 188 210	41,150 7,278 38,115	63	22	8,008 1,184 2,780
Asiatic Turkey). All other Europe.	90,564 33,192	1,440 274	204 83	89	7	3	3	1,045 7,982	17,942	84, 502 5, 298	34	6	4,810 1,874
America: Canada. Mexico. All other America.	10,877 23,414 4,778	4, 382 91 169	946 13 30	490	48	42	31	2,883 1,206 1,334	241 8 80	1,459 21,400 2,688	1,536 6 2	752 2 4	4, 517 785 642
Asia: Japan China British India	236, 062 11, 180 21, 984	835,068 15 6	99,945 3 1	11,366 200	1,527 22	160	240	27,182 5,064 612	508	63,829 2,832 21,142	531	111	42,720 3,281 207
All other countries	61,492	6,359	689	. 178	26			33,908	123	24, 497			2,249

According to Table 13, the value of imports of cotton manufactures amounted last year to \$62,010,286, more than one-half of which consisted of laces and embroideries. Switzerland leads in the value of laces imported into this country, with \$12,591,620, or more than one-third of the total, and is followed by France, with \$9,125,671, while Germany and the United Kingdom also contributed largely to this class of imports.

Of the bleached, dyed, or printed cloths imported, 79 per cent came from the United Kingdom, which country also supplied more than four-fifths of the thread, yarn, and warps imported. Practically all of the imports of hosiery and knit goods, amounting in value to \$6,917,828, came from Germany.

The following table shows the yearly exports and imports of cotton manufactures since 1900:

TABLE 14.—VALUE OF EXPORTS AND IMPORTS OF COTTON GOODS, BY COUNTRIES TO WHICH EXPORTED AND FROM WHICH IMPORTED: 1900 TO 1909.

[Compiled by the Bureau of Statistics, Department of Commerce and Labor.]

COUNTRY.	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900
Exports.										
Total	\$31,878,566	\$25,177,758	\$32,305,412	\$52,944,033	\$49,666,080	\$22,403,713	\$32, 216, 304	\$32, 108, 362	\$20, 272, 418	\$24,003,087
Europe: United Kingdom Germany All other Europe	2,092,212 1,035,235 738,992	2, 487, 349 1, 140, 332 972, 741	2, 274, 014 1, 185, 492 965, 549	2,042,377 971,647 654,353	1,446,409 601,541 383,692	1,352,212 1,074,278 336,574	1, 269, 346 1, 106, 832 322, 508	1,458,962 601,953 386,930	1,744,113 621,814 371,971	1, 256, 729 385, 683 270, 229
America: Canada Mexico. Central America British West Indies (including Bermuda). Cuba.	3,712,506 646,488 2,456,345	3, 279, 519 869, 244 2, 363, 424	3,507,446 934,910 2,636,591	3,587,567 821,302 2,260,618	3,030,341 880,074 2,052,298	3,139,508 732,380 1,741,714	3, 046, 125 597, 742 1, 251, 975	2,820,781 661,721 1,114,874	2,554,144 760,090 1,271,605	2, 691, 992 958, 889 1, 176, 142
(including Bermuda). Cuba	950,876 1,906,964	687,311 1,585,376	836,047 1,608,653	713,885 1,507,473	659,382 1,330,260	486,027 684,212	763, 620 416, 970	619,647 378,081	456, 395 386, 037	435, 949 612, 252
Haiti Other North America Brazil Chile	1,258,197 579,181 265,177 490,016	742, 978 577, 516 373, 545 616, 814	617,659 828,737 548,367 989,059	822,815 452,468 636,374 898,155	524, 860 650, 342 823, 120 764, 468	484,960 557,809 786,860 694,594	572, 077; 582, 090 686, 640 613, 835	627, 040 420, 369 607, 535 439, 293	744, 424 443, 472 373, 748 666, 196	745, 663 560, 290 436, 118 531, 131
Colombia Peru Venezuela Other South America	823,216 104,760 346,443 1,005,291	624, 587 132, 409 319, 937 692, 939	874,813 155,792 439,160 843,830	693,021 112,797 429,645 902,684	896, 143 157, 202 438, 094 1, 105, 447	943, 487 162, 785 547, 080 564, 586	1, 484, 261 124, 411 499, 603 598, 481	810, 661 103, 519 500, 857 609, 585	890, 167 123, 090 903, 862 364, 431	310, 360 113, 332 333, 294 355, 556
Asia and Oceania: China British East Indies British Australasia Aden. Philippine Islands Other Asia and Oceania	8, 067, 472 760, 677 979, 440 1, 312, 265 1, 059, 042 605, 024	3,413,248 296,807 1,039,426 998,736 836,845 711,534	5,955,331 684,990 1,229,627 1,995,713 1,646,874 813,339	29,814,075 655,346 1,285,085 1,634,134 403,896 2 862,092	28,017,190 486,843 1,079,179 1,140,875 850,244 21,761,726	4,139,000 453,721 807,269 1,435,764 322,259 421,561	13,719,413 720,826 848,575 1,634,620 316,570 358,707	16, 494, 248 577, 724 918, 688 (1) (1) 1, 436, 843	4,620,998 436,009 694,435 (1) (1) 1,451,723	8,804,778 524,419 622,228 (1) (1) 1,838,346
AfricaAll other countries	682, 747	415,141	733,419	782, 224	586, 350	535,073	681,077	508,005 11,046	380, 926 12, 768	455, 309 8 584, 398
Imports.										
Total.	62, 010, 286	68, 379, 781	73,704,636	63,043,322	48, 919, 936	49, 524, 246	52, 462, 755	44, 460, 126	40, 246, 935	41,296,239
Europe: United Kingdom. Germany. France. Switzerland. Beiglum. Austria-Hungary.	19, 951, 548 14, 859, 770 11, 959, 565 13, 533, 057 558, 974 490, 658	22, 421, 517 18, 036, 650 11, 669, 509 14, 478, 092 635, 846 280, 236	22, 971, 167 18, 212, 531 15, 309, 399 15, 286, 363 591, 576 293, 965	19, 446, 227 16, 459, 615 13, 038, 125 12, 578, 536 458, 557 218, 974	15, 089, 333 14, 332, 763 8, 701, 625 9, 728, 717 354, 214 113, 833	16, 831, 493 14, 156, 596 7, 996, 644 9, 526, 442 305, 001 152, 655	18, 685, 784 14, 136, 286 8, 529, 531 10, 095, 362 301, 578 157, 771	16,376,611 11,071,974 7,440,592 8,716,253 254,753 119,773	14, 299, 999 10, 291, 398 6, 383, 710 8, 493, 022 260, 690 117, 870	17,110,588 8,863,297 5,623,340 8,975,580 321,863 107,128
Italy. Spain Netherlands. Turkey (including Aslatic Turkey). All other Europe.		182,792 84,811 17,333	237, 965 62, 252 85, 325	97,520 86,952 60,116	41, 281 57, 400 48, 880	58,922 57,753 26,223	57, 460 54, 899 27, 690	37,673 55,572 8,808	14,677 633 3,225	10,093 2,747 11,417
Asiatic Turkey) All other Europe	90,564 33,192	89,552 41,678	69, 637 65, 704	43,725 72,600	42,796 34,072	48,033 39,112	67,724 92,815	54,238 16,636	73,063 5,826	68,355 8,217
America: Canada Mexico All other America.		20, 912 28, 787 4, 347	48, 496 40, 720 4, 966	10,467 39,110 2,074	19,429 44,154 2,465	11, 485 52, 062 10, 302	8,782 44,024 1,774	14,997 46,590 2,079	9, 953 43, 566 4, 348	6,527 33,328 1,460
Asia: Japan China British India.	236,062 11,180 21,984	305,270 29,028 44,036	333,881 21,853 43,311	316,278 14,657 67,872	202, 736 25, 618 50, 441	181,286 24,199 23,375	143, 234 14, 663 27, 626	153,876 20,967 51,603	135, 488 18, 492 65, 472	71,066 25,073 47,742
All other countries	61,492	9,385	25, 525	31,917	30,179	22,663	15,752	17, 131	25, 503	8,418

¹ Included in "Other Asia and Oceania." ² Includes exports to Japan in 1906, valued at \$393,628 and in 1905, valued at \$1,430,710.

As indicated in Table 14, the annual exports of cotton manufactures are subject to very wide fluctuations, those for 1909 amounting to \$31,878,566, or only three-fifths of those for 1906, when they amounted to \$52,944,033. This reduction is due to the falling off in the exports to China, which dropped from \$29,814,075 in 1906 to \$8,067,472 in 1909, and strikingly illustrates the necessity for a wider range of markets for American manufactures.

The value of imports of cotton goods during the year was \$62,010,286 compared with \$73,704,636 in

1907 and \$41,296,239 in 1900. Practically all of the increase since 1900 is due to the importation of hosiery and other knit goods from Germany, and of laces and embroideries from Switzerland and France.

TRADE IN COTTON FOR THE UNITED STATES.

The following table shows the production, net weight of bale, value of lint per pound, domestic exports, consumption, and net imports of cotton, 1790 to 1908:

³ Includes value of exports to Hawaii.

Table 15.—PRODUCTION, CONSUMPTION, EXPORTS, AND IMPORTS OF COTTON FOR THE UNITED STATES: 1790 TO

					,			1						(
ļ	•	PRODUCTI	ON.			'				PRODUCT	ION.				
YEAR.	Running bales, counting round as half bales (number).	Equivalent 500-pound bales, gross weight (number).	Aver- age net weight of bale (pounds).	Value of lint per pound, upland cotton (cents).	Consumption (500-pound bales).	Exports of domestic cotton (500- pound bales).	Net im- ports (500- pound bales).	YEAR.	Running bales, counting round as half bales (number).	Equivalent 500-pound bales, gross weight (number).	Average net weight of bale (pounds).	Value of lint per pound, upland cotton (cents).	Consumption (500-pound bales).	Exports of domestic cotton (500- pound bales).	Net im- ports (500- pound bales).
1908 1907 1906 1905	13, 432, 131 11, 325, 882 13, 305, 265 10, 725, 602 13, 697, 310	13, 587, 306 11, 375, 461 13, 595, 498 10, 804, 556 13, 679, 954	484 480 490 482 478	9.2 11.5 10.0 10.9 8.7	5,198,963 4,493,028 4,974,199 4,877,465 4,523,208	8,889,724 7,779,508 8,825,237 6,975,494 9,119,614	165, 451 140, 869 202, 733 133, 464 130, 182	1848 1847 1846 1845 1844	2, 866, 938 2, 439, 786 1, 778, 651 2, 100, 537 2, 394, 503	2,615,031 2,128,433 1,603,763 1,806,110 2,078,910	436 417 431 411 415	7.5 8.0 11.2 7.9 5.6	586, 032 537, 427 385, 916 363, 365 337, 730	2,053,204 1,628,549 1,054,440 1,095,116 1,745,812	22 558 122 386 2 680
1903	10,015,721 10,784,473 9,748,546 10,245,602	10,045,615 10,827,168 9,675,771 10,266,527 9,459,935	480 481 489 480 476	12.2 8.2 8.1 9.3 7.6	3,980,567 4,187,076 4,080,287 3,603,516 3,687,253	6,290,245 6,960,880 6,928,697 6,860,917 6,221,541	100,298 149,113 190,080 116,610 134,778	1843 1842 1841 1840 1839	2,030,409 2,378,875 1,683,574 1,634,954 2,063,915	1,750,060 2,035,481 1,398,282 1,347,640 1,653,722	412 409 397 394 383	7.7 7.2 7.8 9.5 8.9	298, 872 278, 196 222, 461 245, 045 236, 525	1,327,267 1,584,594 1,169,434 1,060,408 1,487,882	517 1,835 107 1,210 297
1898 1897 1896 1895	8,532,705	11,435,368 10,985,040 8,515,640 7,146,772 10,025,534	489 482 477 477 484	4.9 5.6 7.3 8.2 5.9	3,672,097 3,472,398 2,841,394 2,499,731 2,983,665	7,655,281 7,839,467 6,126,185 4,761,505 6,961,372	103,223 105,802 114,712 112,001 99,399	1838 1837 1836 1835	1,360,532 1,801,497 1,423,930 1,360,725 1,253,406	1,092,980 1,428,384 1,129,016 1,061,821 962,343	384 379 379 373 367	13.4 10.1 13.2 16.5 17.4	221,738 195,100 176,440 184,731 166,523	827,248 1,191,905 888,423 847,263 774,718	319 355 2 510 427 1,574
1893 1892 1891 1890	7,493,000 6,700,365 9,035,379 8,652,597 7,472,511	7, 433, 056 6, 658, 313 8, 940, 867 8, 562, 089 7, 472, 511	474 475 473 473 478	7.5 8.4 7.3 8.6 11.5	2,300,276 2,415,875 2,846,753 2,604,491 2,518,409	5,307,295 4,485,251 5,896,800 5,850,219 4,928,921	59,405 85,735 64,394 45,580 18,334	1833 1832 1831 1830 1829	1, 225, 895 1, 114, 286 1, 069, 444 1, 026, 393 1, 076, 696	930,962 815,900 805,439 732,218 763,598	363 350 360 341 339	12.9 12.3 9.4 9.7 10.0	149,159 142,352 130,895 129,938 89,723	769, 436 649, 397 644, 430 553, 960 596, 918	308 69 2 22 22 22 378
1888 1887 1886 1885 1884	6,938,290 7,046,833 6,505,087 6,575,691 5,682,000	6,923,775 6,884,667 6,314,561 6,369,341 5,477,448	477 467 464 463 460	10.7 10.3 10.3 9.4 10.5	2,309,250 2,205,302 2,049,687 2,094,682 1,687,108	4,730,192 4,519,254 4,301,542 4,200,647 3,730,170	15,284 11,983 7,552 8,270 7,144	1828 1827 1826 1825 1824	953,079 805,970 1,057,402 817,308 751,748	679,916 564,854 732,218 533,473 449,791	341 335 331 312 286	9.9 10.3 9.3 12.2 18.6	84,788 84,516 103,535	529, 674 421, 181 588, 620 409, 071 352, 900	² 40 597 74 79 26
1883 1882 1881 1880 1879	5,713,200 6,949,756 5,456,048 6,605,750 5,755,359	5,521,963 6,833,442 5,136,447 6,356,998 5,466,387	462 470 450 460 454	10.6 10.6 12.2 11.3 12.0	1,813,865 2,038,400 1,849,457 1,865,922 1,500,688	3,733,369 4,591,331 3,376,521 4,453,495 3,742,752	11,247 4,716 3,261 5,447 7,578	1823 1822 1821 1820 1819	656,028 704,698 636,042 575,540 632,576	387,029 439,331 376,569 334,728 349,372	282 298 283 278 264	1	100,000	286, 739 347, 447 289, 350 249, 787 255, 720	932 110 2 196 427 2 4,571
1878 1877 1876 1875 1874	4,632,313	4,745,078 4,494,224 4,118,390 4,302,818 3,528,276	447 450 440 444 440	10.8 11.3 11.7 13.0 15.0	1,457,266 1,458,667 1,314,489 1,255,712 1,098,163	3,290,167 3,197,439 2,839,418 3,037,650 2,504,118	5,049 5,046 4,832 4,498 3,784	1818 1817 1816 1815 1814	446, 429 465, 950 439, 716 369, 004 254, 545	261,506 271,967 259,414 209,205 146,444	280 279 282 271 275	24.0 34.0 26.0 29.0 21.0	51,778	175, 994 184, 942 171, 299 163, 894 165, 997	2 4,454 3,086 2,048 2 44 2 266
1873 1872 1871 1870 1869	4,170,388 3,930,508 2,974,351 4,352,317 13,011,996	3,873,750 3,650,932 2,756,564 4,024,527 2,409,597	444 444 443 442 440	17. 0 18. 2 20. 5 17. 0 24. 0	1,213,052 1,115,691	2,682,631 2,470,590 1,824,937 2,922,757 1,987,708	3,541 10,016 6,374 1,802 3,026	1813 1812 1811 1810 1809	304, 878 304, 878 325, 203 286, 195 328, 000	156, 904 156, 904 167, 364 177, 824 171, 548	246 246 246 297 250	15.5 16.0	35, 565 33, 473	35, 458 38, 220 57, 775 124, 116 186, 523	3,133 897 431 2 560
1868 1867 1866 1865 1864	2,366,467 2,519,554 2,097,254 2,269,316	2,108,141 2,345,610 1,948,077 2,093,658 299,372	444 445 444 441 477	29. 0 24. 9 31. 6 43. 2 83. 4	860,481 844,044 715,258 614,540 344,278	1,300,449 1,502,756 1,401,697 1,301,146 17,789	1,870 345 21,035 10,322 68,798	1808 1807 1806 1805 1804	334,821 289,855 285,714 304,348 261,044	156,904 167,364 167,364 146,444 135,983	224 276 280 230 249	16.0 19.0 21.5 22.0 23.0	23,013	101,981 21,261 127,889 71,315 76,780	2 1,601 6,297 1,485 961 456
1060	450,000 1,600,000 4,500,000 3,849,469 15,387,052	449,059 1,596,653 4,490,586 3,841,416 4,309,642	477 477 477 477 477 461	101.5 67.2 31.3 13.0 11.0	219,540 287,397 369,226 841,975 845,410	23,998 22,770 10,129 615,032 3,535,373	52,405 67,695 61,731	1803 1802 1801 1800 1799	222, 222 231, 092 210, 526 153, 509 88, 889	125,523 115,063 100,418 73,222 41,841	270 238 228 228 228 225	19.0 44.0 28.0	18,829	47,768 41,822 35,580	183 21,153 2170 8,696 8,870
1858 1857 1856 1855 1854	4,018,914 3,257,339 3,093,737 3,665,557 2,982,634	3,758,273 3,012,016 2,873,680 3,220,782 2,708,082	447 442 444 420 434	12.1 12.2 13.5 10.3 10.4	867,489 550,708 761,614 731,484 641,391	2,772,937 2,237,248 2,096,565 2,702,863 2,016,849	1,678 2,295 4,425	1798 1797 1796 1795 1794	66, 667 48, 889 44, 444 35, 556 35, 556	31,381 23,013 20,921 16,736 16,736	225 225 225 225 225 225	44.0 39.0 34.0 36.5 36.5		19,065 18,720 7,577 12,213 9,414	7,532 7,761 7,336 8,737 8,592
1853 1852 1851 1850 1849	3,074,979 3,416,214 3,126,310 2,454,442 12,469,093	2,766,194 3,130,338 2,799,290 2,136,083 1,975,274	430 438 428 416 429	11.0 11.0 9.5 12.1 12.3	663,204 736,468 617,468 422,626 575,506	1,975,666 2,223,141 2,186,461 1,854,474 1,270,763	1,141 1,423 512 330 485	1793 1792 1791 1790	22, 222 13, 333 8, 889 6, 667	10,460 6,276 4,184 3,138	225 225 225 225 225	33.0 32.0 29.0 26.0	11,000	3,565 1,097 277 379	5,127 5,503 1,112 697

¹ Equivalent bales of 400 pounds.
2 Excess of foreign exports over total imports.
Production.—The production statistics relate, when possible, to the year of growth, but when figures for the growth year are wanting, a commercial crop which represents the trade movement is taken. The statistics of production have been compiled from publications of the United States Department of Agriculture for 1790 to 1898.
Census figures have, however, been used when available, including those for 1899 to 1908.
Census figures have, however, been used when available, including those for 1899 to 1905.
Value of lint.—The value of lint per pound shown since 1902 relates to the average grade of upland cotton marketed prior to April 1 of the following year; from 1890 to 1901, the average price of middling cotton on the New Orleans Cotton Exchange; and from 1790 to 1889, as published in reports of the United States Department of Agriculture.
Construction.—Compiled from publications of the United States Department of Agriculture.

Agriculture.

Consumption.—Compiled from publications of the United States Department of Agriculture for 1790 to 1894; and from the reports of Latham, Alexander & Company, for 1895 to 1903. Census figures have been taken when available.

Domestic exports and not imports.—Compiled from American state papers for 1790 to 1819 and from "Commerce and Navigation of the United States," Bureau of Statistics, Department of Commerce and Labor, for 1820 to 1908. The export year begins October 1 for 1790 to 1842, July 1 for 1843 to 1866, and September 1 for 1867 to 1908. The period for consumption, exports, and imports is designated by the year in which the record begins rather than that in which it ends.

WORLD'S CONSUMPTION OF COTTON, AND TRADE IN COTTON AND ITS MANUFACTURES FOR SELECTED COUNTRIES.

Statistics of the number of cotton spindles and of the mill consumption of cotton throughout the world in 1900 and 1909 are shown in the following table:

Table 16.—World's cotton spindles and mill consumption, by countries: 1900 and 1909.

[The statistics for the United States were collected by this Bureau. Those for other countries have been compiled from a number of authorities, among them being the reports of the International Federation of Master Cotton Spinners' and Manufacturers' Associations, Manchester, and the Financial and Commercial Chronicle, and Cotton Facts, New York.]

COUNTRY		SPINDLES BER).	MILL CONSUMPTION (BALES).1			
	1909	1900	1909	1900		
Total	133, 377, 000	105,661,000	19,397,000	15, 185, 000		
United States: Cotton-growing states. All other states Europe: United Kingdom Germany Russia France Italy Austria-Hungary Spain Switzerland Belgium Portugal Netheriands Sweden Denmark Norway Other European countries. British India Brazil Mexico Canada All other countries	17, 589, 000 53, 312, 000 10, 103, 000 8, 076, 000 7, 000, 000 4, 352, 000 1, 907, 000, 000 1, 907, 000 1, 907, 000 201, 907, 000 76, 000 220, 000 1, 732, 000 1, 732, 000 1, 735, 000 1, 755, 000 200, 000 1, 000, 000 755, 000, 000 1, 755, 000 200, 000 1, 000, 000 755, 000, 000 1, 000, 000 755, 000, 000 1, 000, 000 755, 000, 000 1, 000, 000 755, 000, 000 1, 000, 000 755, 000, 000	4,368,000 15,104,000 45,500,000 8,000,000 7,500,000 1,940,000 2,015,000 1,550,000 1,550,000 3,200,000 220,000 220,000 360,000 360,000 40,000 1,724,000 1,274,000 4,945,000 4,945,000 470,000 470,000 550,000	2, 476, 000 2, 723, 000 3, 512, 000 1, 765, 000 1, 514, 000 970, 000 941, 000 795, 000 327, 900 110, 000 62, 000 85, 000 85, 000 23, 000 111, 000 75, 600 1, 661, 000 400, 000 400, 000 1275, 000 185, 000	1,523,000 2,350,000 3,330,000 1,400,000 1,350,900 475,000 675,000 675,000 125,000 10,000 35,000 11,000 50,000 1,162,000		

¹ The statistics for the United States, Russia, British India, Japan, Switzerland, and Brazil represent bales of 500 pounds each.

The statistics of Table 16 have been compiled from a number of sources, and while absolute accuracy is not claimed, they approximate the facts. According to this table the number of cotton spindles operated in the world during the year ending August 31, 1909, was 133,377,000, and the quantity of cotton consumed by them 19,397,000 bales, indicating a weekly consumption of about 373,000 bales. In 1900 the approximate number of spindles was 105,661,000, and the consumption of cotton 15,185,000 bales, or a weekly consumption of 292,000 bales. It must be kept in mind, however, that the total world's consumption of cotton is not shown in the table, as in a number of eastern countries and in South and Central America, large quantities of cotton are grown and

consumed which do not enter into commercial channels and which therefore can not be estimated with any certainty.

The relative importance of the several countries in the production and consumption of cotton is graphically presented by Diagram 3.

The production of cotton for mill consumption in 1908 was, according to Census Bulletin 100, 19,574,000 bales of 500 pounds net, whereas the consumption during the year ending August 31, 1909, was 19,397,000 bales of 500 pounds gross weight. It is impracticable to reduce the consumption statistics to net-weight bales, as it is not known how much foreign-grown cotton reported for countries other than the United States is expressed net weight and how much gross weight. Assuming, however, that all of the foreign-grown cotton is expressed in net-weight bales and that the American cotton wherever consumed is in gross-weight bales, the world's consumption would be estimated at 18,825,000 bales of 500 pounds net.

The fluctuations in the world's supply of cotton are measured practically by the variations in the annual production in the United States, as this country furnishes about two-thirds of the total supply. The increase in the quantity of cotton consumed during the past year over the preceding year is due entirely to the increase in the United States. If the consumption of cotton during the year ending August 31, 1910, should equal that for 1909, it would appear that a crop of not less than 13,000,000 bales will be required from the United States to prevent a decrease in the world's stocks of cotton.

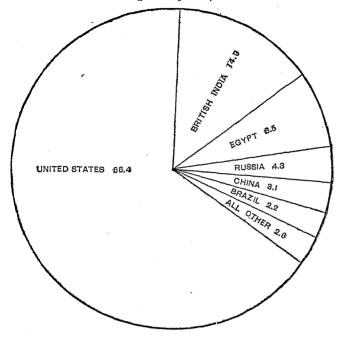
UNITED STATES.

The financial disturbance in the fall of 1907 had a far-reaching effect on the industry, beginning with the manufacturer of cloth who first felt the need of restricting expenditures to those absolutely necessary, slowly but surely working its way down to the spinner, and thence to those interested in the sale and distribution of the raw material. It would appear that this condition has been largely relieved, for the consumption of cotton in the United States during the year ending August 31, 1909, as indicated by Table 16, was 5,199,000 bales, the high-

DIAGRAM 3.—RELATIVE IMPORTANCE OF THE SEVERAL COUNTRIES IN THE PRODUCTION AND CONSUMPTION OF COTTON.

(growth of 1908).

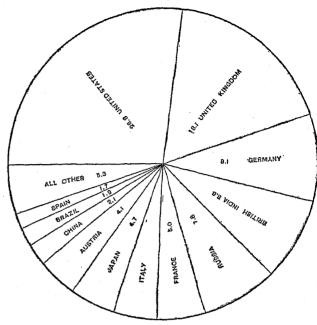
Proportion of world's mill supply of cotton contributed by each country Proportion of total consumption by countries (year ending August 31, 1909).



water mark in the consumption of cotton in America. However, while the industry was far more profitable than in 1908, it was much less satisfactory than in 1906 or 1907. At the beginning of the cotton year, curtailment in the consumption was general in many leading manufacturing communities, and normal conditions were not restored until toward the middle of the month of October, 1908. It is pleasing to note that the labor situation has been practically free from friction during the year.

EUROPE.

Not in recent years has the cotton trade of Europe experienced a more disappointing season than that of 1908-9. The manufacturers had anticipated that the revival of trade in the United States would be quickly reflected in Europe, but in this they were disappointed, for the effects of the financial depression in 1907 were slow in passing. A relatively high range of prices for the raw material in the latter part of the season also delayed the resumption of the manufacture under normal conditions. At the close of the season the spindles of Great Britain and a large portion of those on the Continent were running on short time with little immediate prospect of resumption of full work. While the manufacturers of cloth may not have suffered quite to the same extent as spinners, the year has been unprofitable owing to the stagnation in Eastern markets, notably India and China, and the marked falling off in the internal demand throughout Europe, following upon short crops and trade depression.



UNITED KINGDOM.

As shown in Table 16, 53,312,000 spindles were operated in the United Kingdom in 1909 compared with 45,500,000 in 1900, an increase in nine years of 17 per cent. While the number of spindles in the United Kingdom is 40 per cent of the total for the world, the quantity of cotton consumed during the year ending August 31, 1909, was only 18 per cent of the total. The explanation of this condition is found in the fact that the mills there manufacture much finer goods as a rule and consume less cotton per spindle than those of the other countries.

Of the imports of cotton into Great Britain during the year 1908, about 77 per cent was contributed by the United States, 17 per cent by Egypt, and 3 per cent by British India. A considerable portion of the cotton imported into the United Kingdom is for transshipment to other countries, a condition brought about by the excellent shipping facilities of the country.

CONTINENTAL EUROPE.

Germany.—Measured by the number of spindles and by the quantity of cotton consumed, Germany leads the countries of continental Europe, and is surpassed only by the United Kingdom and the United States. According to Table 16, the number of cotton spindles in Germany increased from 8,000,000 in 1900 to 10,163,000 in 1909, or 27 per cent. The increase in the consumption of cotton in the nine years is 365,000 bales, or 26 per cent. About two-thirds of the country's supply of cotton is secured from the

United States, while practically all of the remainder is imported from British India and Egypt. Raw cotton is the largest single import of Germany, and manufactured cotton the largest export. Germany is the second largest importer of cotton in the world, and the second largest exporter of cotton goods. In 1908, according to Table 17, this country imported 1,980,274 bales of cotton and exported 222,606 bales. During the year the value of imports and exports of cotton goods was \$46,037,292 and \$104,945,862, respectively.

France.—As indicated in Table 16, there are at present approximately 7,000,000 spindles in France, compared with 5,500,000 in 1900, an increase of 27 per cent in the nine years. The consumption of cotton during this period increased from 700,000 bales to 970,000 bales, or 39 per cent. France ranks third in exports of cotton goods, which in 1908 were valued at \$58,859,403. During the same year the country imported 1,238,121 bales of cotton and exported 214,873 bales. About two-thirds of the cotton imported is American, although considerable quantities of Indian and other short-fiber cotton are also imported. In addition, the manufacturers of the finer goods use a great deal of Egyptian cotton.

Russia.—According to Table 16, the number of spindles in Russia increased from 7,500,000 in 1900 to 8,076,000 in 1909, or 8 per cent, and the quantity of cotton consumed from 1,350,000 bales to 1,514,000 bales, or 12 per cent. Cotton is imported into Russia direct from a number of countries, while large quantities are reshipped from the United Kingdom and Germany. The total imports of raw cotton in 1908 amounted to 1,048,643 bales. Practically all the cotton exported from Persia comes to Russia, where factories have been specially, equipped for spinning it. In addition to the cotton imported, large quantities grown in Asiatic Russia are consumed in Russian While the condition of the industry in Russia during 1909 has not been satisfactory, the outlook at the close of the season is brighter. The harvest promises to be a plentiful one, and as purchases of goods for some time past have been only for immediate needs, it is probable that an increased demand will soon be felt.

Austria-Hungary.—There are in Austria-Hungary 4,352,000 spindles compared with 3,300,000 nine years ago, an increase of 32 per cent. The quantity of cotton consumed during this period increased from 675,000 bales to 795,000 bales, or 18 per cent. Last year 780,223 bales of cotton were imported. About two-thirds of this supply came from the United States, and practically all of the remainder from India. The development of the textile industry in Austria-Hungary since 1900 has been remarkable. Not until very recent years has this country been able to supply its own demands, and it is therefore noteworthy that in 1908

its exports of cotton manufactures were valued at \$12,983,614. More than one-half of these exports went to Turkey and the Balkan states. During 1909 the political disturbance in the Balkan states occasioned some depression in the markets for cotton goods in this country.

Belgium.—The number of spindles in Belgium in 1909 was approximately 1,231,000 compared with 920,000 in 1900, indicating an increase during the nine years of 311,000, or 34 per cent. During this period the consumption of cotton increased from 170,000 bales to 210,000 bales, or 24 per cent. According to Table 17, this country imported last year 467,477 bales of cotton and exported 251,249 bales. The imports and exports of cotton goods are almost equal, the value of the former amounting to \$46,449,057, and of the latter to \$50,860,145.

Italy.—Probably the most interesting development in the cotton-manufacturing industry in any of the European countries during the period covered by Table 16 is that in Italy, where the number of spindles increased from 1,940,000 in 1900 to about 5,000,000 in 1909, and the quantity of cotton consumed from 475,000 bales to 941,000 bales. In 1908 Italy imported 911,573 bales of cotton and exported 46,164 bales, while the value of the imports of cotton goods amounted to \$7,615,558. This country relies upon America and India for its cotton supply.

Other European countries.—In addition to the European countries already named, the manufacture of cotton is an important industry in a number of others, chief of which are Spain, Switzerland, Portugal, the Netherlands, Norway, Sweden, Greece, and Denmark. The statistics for these, as well as for several other countries, are included in Table 16.

BRITISH INDIA.

According to the statistics of Table 16, the number of spindles in the mills of British India increased from 4,945,000 in 1900 to 5,800,000 in 1909, or 17 per cent, and the quantity of cotton consumed from 1,162,000 bales to 1,661,000 bales, or 43 per cent. According to these figures, the country holds fourth place in respect to quantity of cotton consumed. In addition to the cotton consumed in the mills, it is estimated that about 600,000 bales of 500 pounds each were used in the homes of the people. The cotton imported into India is used mainly for the spinning of finer counts than is possible with native cotton. The exports of cotton for the year ending March 31, 1909, shown in Table 17, amounted to 1,522,752 bales. The value of cotton goods imported during the year named amounted to \$123,331,711, and those exported to \$37,428,252.

JAPAN.

As indicated by the statistics of Table 16, the number of cotton spindles in Japan at the present time is

1,732,000, compared with 1,274,000 in 1900, while the quantity of cotton consumed increased from 700,000 bales in 1900 to 910,000 in 1909. The imports of cotton from India have been much greater than in previous seasons, while the quantity imported from the United States also increased. The large consumption per spindle is due probably to the fact that spindles are frequently operated day and night and are mostly frame spindles, which consume about 50 per cent more cotton than mule spindles. Practically the entire supply of cotton is imported, the home production in 1908 amounting to only about 6,000 bales. Of the 850,945 bales of 500 pounds each imported during the year, 402,725 were secured from British India, 213,290 from the United States, and 174,603 from China.

CHINA.

The number of cotton spindles in China has increased from 550,000 in 1900 to 800,000 in 1909, and the estimated quantity of cotton consumed from 200,000 bales to 400,000 bales. These figures refer, of course, to the cotton mills proper, and do not include the large quantity of cotton consumed in the homes of the people. Shanghai, with practically onehalf of the spindles in the empire, is the most important cotton-manufacturing center. As shown in Table 17, China ranks second in value of cotton goods imported and is exceeded only by British India. The total for the year 1908 amounted to \$75,303,024. About \$30,-O00,000, or two-fifths of the total, represents yarn which is used almost entirely on hand looms in the manufacture of cloth. The value of cloth imported amounted to \$43,411,778.

BRAZIL.

There has been a remarkable development in the cotton-manufacturing industry in Brazil. In 1900 the number of spindles was 450,000, while at the present time the number is estimated at 1,000,000. The raw material for these mills is home grown, and the manufacture, while confined to the coarser and cheaper goods, has a promising future. Notwithstanding the rapid development of the manufacture in this country, the imports of cotton goods in 1907 were valued at

\$23,279,897, of which \$14,708,453 represents the value of cloth imported.

MEXICO.

While entirely reliable data as to the manufacture of cotton goods in Mexico are not available, the information presented in Table 16 is approximately correct. According to this table, the number of spindles increased from 470,000 in 1900 to 750,000 in 1909, and the quantity of cotton consumed from 125,000 bales to 185,000 bales. Practically all of the cotton consumed in the Mexican mills in the last few years has been home-grown. The value of cotton goods imported amounted to \$4,644,602, compared with \$6,904,893 in 1907.

CANADA.

The relative importance of the cotton manufacturing industry in Canada is indicated by the statistics of Table 16, which show that the number of spindles has increased from 550,000 in 1900 to 831,000 in 1909, and the quantity of cotton consumed from 110,000 bales to 127,000 bales. The statistics as to the quantity of cotton consumed seem to indicate that there has been a marked tendency during this period toward the production of finer goods, and hence a decrease in the consumption of cotton per spindle. During the fiscal year ending March 31, 1909, the imports of cotton goods into Canada were valued at \$11,469,095.

OTHER COUNTRIES.

There are a number of other countries of small though increasing importance in the manufacture of cotton goods that must be taken into account in a review of the world's progress in this industry and in reckoning with future requirements for cotton. Among the countries which are growing in importance in the cotton industry may be named Asiatic Turkey, Indo-China, Peru, and Argentina.

IMPORTS AND EXPORTS OF COTTON AND COTTON GOODS.

The following table, showing statistics of the trade in cotton and cotton goods for selected countries, may be of interest:

Table 17.—IMPORTS AND EXPORTS OF RAW COTTON AND OF COTTON MANUFACTURES FOR SELECTED COUNTRIES.

[Compiled by the Bureau of Statistics, Department of Commerce and Labor. Owing to many differences in the methods employed by the several countries in classifying their imports and exports of cotton manufactures and in presenting the same, it is very difficult, if not impracticable, to harmonize the conditions so as to present strictly comparable statistics.]

			VALUE	OF COTTON	MANUFACTU	RES.
COUNTRY.	Year.	Cotton (500-pound bales).	Total.	Cloth.	Yarn and thread.	All other.
Imports. Austria-Hungary Belgium Bulgaria Denmark	1908 1908 1908	780, 223 467, 477 5, 324	\$14,935,917 46,449,057 3,875,902	\$1,881,271 13,987,901 1,816,303	\$7,547,889 9,102,602 1,801,866 1,155,080	\$5,506,757 23,358,554 257,733 1,326,600
France	1907 1908	5,324 38,720 1,238,121	7,981,040 16,931,118	5,499,360 2,100,419	5,471,550	9,359,149
Gormany Greece Italy Netherlands Norway	1908 1908 1908 1908 1907	1,980,274 10,787 911,573 375,474 15,489	46, 037, 292 2, 061, 283 7, 615, 558 26, 925, 932 3, 843, 469	10,028,368 1,713,837 2,190,870 6,611,313 2,522,470	23,183,342 247,726 1,321,915 15,684,431 922,697	12,825,582 99,720 4,102,773 4,630,188 398,302
Portugal. Roumania. Russia. Servia. Spain	1907 1906 1908 1908 1908	75,620 3,165 1,048,643 1,341 413,645	3, 678, 336 13, 813, 718 8, 963, 575 2, 732, 008 3, 196, 264	2, 466, 126 8, 175, 791 4, 340, 935 1, 119, 037 809, 464	545, 284 3, 998, 369 4, 130, 815 1, 252, 949 546, 728	660, 926 1, 639, 558 491, 825 360, 022 1, 840, 072
Sweden Switzerland United Kingdom Canada Cuba	1907 1908 1908 1909 1907	91,017 239,941 4,121,393 130,632 2,621	6, 199, 562 20, 361, 853 46, 111, 809 11, 469, 095 9, 218, 409	2,923,098 11,946,012 9,338,283 5,486,262 7,165,375	1,537,792 4,276,605 1,928,959 1,177,461 345,728	1,738,672 4,139,236 34,844,567 4,805,372 1,707,306
Mexico. United States. Argentina. Brazil Chile	1909 1909 1908 1907 1908	6,892 173,036 1,615 113 717	4,644,602 62,010,286 27,016,802 23,279,897 9,616,810	2,423,223 10,190,137 20,469,493 14,708,453 4,542,578	1,111,550 3,306,172 2,433,692 2,607,825 1,067,223	1,109,829 48,513,977 4,113,617 5,963,619 4,007,009
Peru	1907 1908 1908 1907 1908	26,718 850,945 1,400 1,312	3,409,972 75,303,024 9,977,893 6,123,946 4,336,625	3,165,313 43,411,778 8,913,956 3,733,309 2,318,192	244, 659 29, 957, 647 906, 197 1, 307, 448 432, 478	1,933,599 157,740 1,083,189 1,585,955
British India French Indo-China Dutch East Indies Philippine Islands Australia	1909 1907 1907 1908 1907	28,109 20,286 1,226 3,057	123, 331, 711 6, 427, 910 23, 919, 758 7, 138, 672 33, 125, 819	104, 527, 554 4, 516, 851 20, 408, 906 4, 754, 993 17, 649, 131	11,840,195 1,543,190 2,137,299 1,287,549 1,740,534	6,963,962 367,869 1,373,553 1,096,130 13,736,154
New Zealand. Egypt. Algeria. Tunis	1907 1908 1907 1906	368 185	6,839,404 18,054,570 11,466,297 2,147,825	3,523,122 16,194,415 10,111,656 1,820,664	402, 260 1, 445, 511 164, 796 125, 595	2,914,022 414,644 1,189,845 201,566
Other French Africa. British South Africa. Other British Africa. German Africa.	1907 1908 1907 1907	49	9,647,068 9,272,683 9,060,532 4,432,274	8,651,481 5,150,266 (1) 2,659,174	298,531 (1) (1) (1) 42,126	697,056 4,122,417 9,060,532 1,730,974
Austria-Hungary Belgium France Germany Italy	1908 1908 1908 1908 1908	5, 961 251, 249 214, 873 222, 606 46, 164	12, 983, 614 50, 860, 145 58, 859, 403 104, 945, 862 21, 437, 583	7, 165, 063 12, 518, 772 28, 354, 595 33, 691, 518 16, 032, 094	2,711,893 10,043,915 2,076,873 9,282,000 3,098,731	3,106,658 28,297,458 28,427,935 61,972,344 2,306,758
Netherlands Russia Switzerland United Kingdom	1000	248, 661 137, 355 581, 940	25,671,636 10,480,765 47,097,849 471,331,593	21, 459, 001 10, 456, 560 11, 005, 146 342, 787, 540	3,445,055 24,205 3,842,618 83,699,868	767, 580 32, 250, 085 44, 844, 185
United States British India Japan Finland	1909 1908	8, 551, 789 1, 522, 752	31, 878, 566 ·37, 428, 252 21, 474, 341 503, 611	21,693,080 5,528,344 7,276,464 464,762	551,062 31,408,391 10,369,950 38,849	9, 634, 424 491, 517 3, 827, 927

1 Included in "All other."

The statistics of Table 17 are for the latest years for which reports are available and show the relative position of the different countries in this class of trade. The United Kingdom ranks first in exports of cotton goods, followed in the order of their importance by Germany, France, Belgium, Switzerland, and British India. As regards imports of these manufactures, British India leads, with \$123,331,711, followed by China, with \$75,303,024, and the United States, with \$62,010,286.

COMMERCIAL AND INDUSTRIAL IMPORTANCE OF AMERICAN COTTON.

The advantages for the production of cotton found in Southern United States are superior to those of any other country. The soil and the climate are well suited to its cultivation, and, with intelligent farm management and suitable labor, better transportation facilities, and the general use of machinery, the production of cotton has become more profitable there than in any other locality. Not only is two-thirds of the world's supply of cotton produced in the United States, but the character of the fiber grown there is superior for general manufacturing purposes.

The relative importance of the cotton industry in this country may be seen from the following figures: The aggregate value of the cereal crops produced in the United States in 1907 was estimated by the Department of Agriculture at \$2,378,000,000; the value of the cotton crop of that year as computed by the Census Bureau was \$701,000,000. The value of all manufactured products returned at the census of 1905 was nearly \$15,000,000,000. Of this amount, textiles constituted \$1,200,000,000 and cotton goods \$450,000,000. Only about one-third of the cotton grown

in the country is manufactured at home; and if the entire production had been manufactured here the total value of cotton goods would have been about \$1,350,000,000. As two-thirds of our raw material is utilized by European manufacturers in the production of goods which are generally of a finer quality than that of the goods made here, the value of the manufactures made from the average American cotton crop is estimated at not less than \$2,000,000,000.

As an illustration of the industrial importance of American cotton, not less than 9,000,000 persons are employed in its production, handling, and manufacture. Of this number, about 6,000,000 are farmers and farm laborers; about 1,000,000 are otherwise engaged, to some extent, with the raw material in the United States; while at least 2,000,000 are concerned with it in foreign countries.

The comparative importance of cotton in the textile industry is brought out in the following statistics and discussion of textile fibers. Table 18 shows, by countries, the approximate quantities of the leading textile fibers produced in 1908.

TABLE 18.—WORLD'S PRODUCTION OF THE LEADING TEXTILE FIBERS: 1908.

[In the preparation of this table a number of sources of information have been utilized, but it has been found impracticable to secure in all instances satisfactory data for the year indicated, and only an approximation to the facts is claimed for the statistics.]

				1		
COUNTRY.	Cotton.	Wool.	Silk.	Flax.	Hemp.	Jute.
Total.	Pounds. 9,787,000,000	Pounds. 2,617,641,000	Pounds. 78,500,000	Pounds. 1,846,235,000	Pounds. 1,188,869,000	Pounds. 2,524,000.00
United States Brazil Argentia Luited Kingdom	212,000,000	311,138,000 1,130,000 328,731,000				
Russia.	423,000,000	133,088,000 380,000,000		26,934,000 1,507,144,000	L	
France. Italy Austria.		78,000,000 21,500,000 41,600,000	1,333,000 10,461,000 754,000	46,109,000 41,917,000 164,620,000	166,843,000	
British India	1 457 000 000	75,000,000 50,000,000	2,825,000			2,524,000,00
apan Jhina Sgypt	300 000 000	42,253,000 3,000,000	20,000,000 34,500,000		18,095,000	
British South Africa		89,783,000				
New Zealand Lll other countries		143,308,000 366,953,000		59,511,000		

The relative importance of the fibers shown in this table has been reversed during the past century. Flax fiber, which was used to a larger extent than any other fiber in 1800, now ranks fourth, and the quantity produced is only about three times what it was at that time. During the same period the production of wool has increased from about 500,000,000 pounds to about 2,500,000,000 pounds, or fourfold, and cotton from about 300,000,000 pounds to about 10,000,000,000 pounds, or over thirtyfold. The increase in the production of commercial jute is most remarkable. The quantity in

Table 17.—IMPORTS AND EXPORTS OF RAW COTTON AND OF COTTON MANUFACTURES FOR SELECTED COUNTRIES.

[Compiled by the Bureau of Statistics, Department of Commerce and Labor. Owing to many differences in the methods employed by the several countries in classifying their imports and exports of cotton manufactures and in presenting the same, it is very difficult, if not impracticable, to harmonize the conditions so as to present strictly comparable statistics.]

•		Cotton	VALUE OF COTTON MANUFACTURES.				
COUNTRY.		(500-pound bales).	Total.	Cloth.	Yarn and thread.	All other.	
Imports. Austria-Finneary	1908	780, 223	\$14,935,917	\$1, 881, 271	\$7, 547, 889	\$5,506,757	
Austria-Hungary Belgium Bulgaria Denmark France	1908 1908 1907 1908	467,477 5,324 38,720 1,238,121	\$14,935,917 46,449,057 3,875,902 7,981,040 16,931,118	\$1,881,271 13,987,901 1,816,303 5,499,360 2,100,419	\$7,547,889 9,102,602 1,801,866 1,155,080 5,471,550	23,358,554 257,733 1,326,600 9,359,149	
Germany Greece Italy Notherlands Norway.	1908 1908 1908 1908 1907	1,980,274 10,787 911,573 375,474 15,489	46, 037, 292 2, 061, 283 7, 615, 558 26, 925, 932 3, 843, 469	10,028,368 1,713,837 2,190,870 6,611,313 2,522,470	23, 183, 342 247, 726 1, 321, 915 15, 684, 431 922, 697	12,825,582 99,720 4,102,773 4,630,188 398,302	
Portugal Roumania Russia Servia Spain	1907 1906 1908 1908 1908	75,620 3,165 1,048,643 1,341 413,645	3,678,336 13,813,718 8,963,575 2,732,008 3,196,264	2, 466, 126 8, 175, 791 4, 340, 935 1, 119, 037 809, 464	545, 284 3, 998, 369 4, 130, 815 1, 252, 949 546, 728	666, 926 1, 639, 558 491, 825 360, 022 1, 840, 072	
Sweden Switzerland United Kingdom Canada Cuba	1907 1908 1908 1909 1907	91,017 239,941 4,121,393 130,632 2,621	6, 199, 562 20, 361, 853 46, 111, 809 11, 469, 095 9, 218, 409	2,923,098 11,946,012 9,338,283 5,486,262 7,165,375	1,537,792 4,276,605 1,928,959 1,177,461 345,728	1,738,672 4,139,236 34,844,567 4,805,372 1,707,306	
Mexico. United States. Argentina. Brazil Chile	1909 1909 1908 1907 1908	6,892 173,036 1,615 113 717	4,644,602 62,010,286 27,016,802 23,279,897 9,616,810	2, 423, 223 10, 190, 137 20, 469, 493 14, 708, 453 4, 542, 578	1,111,550 3,306,172 2,433,692 2,607,825 1,067,223	1,109,829 48,513,977 4,113,617 5,963,619 4,007,009	
Peru	1907 1908 1908 1907 1908	26,718 850,945 1,400 1,312	3,409,972 75,303,024 9,977,893 6,123,946 4,336,625	3,165,313 43,411,778 8,913,956 3,733,309 2,318,192	244,659 29,957,647 906,197 1,307,448 432,478	1,933,599 157,740 1,083,189 1,585,955	
British India. French Indo-China. Dutch East Indies. Philippine Islands. Australia	1909 1907 1907 1908 1907	28,109 20,286 1,226 3,057	123, 331, 711 6, 427, 910 23, 919, 758 7, 138, 672 33, 125, 819	104, 527, 554 4, 516, 851 20, 408, 906 4, 754, 993 17, 649, 131	11,840,195 1,543,190 2,137,299 1,287,549 1,740,534	6,963,962 367,869 1,373,553 1,096,130 13,736,154	
New Zealand. Egypt Algeria Tunis	1907 1908 1907 1906	368	6,839,404 18,054,570 11,466,297 2,147,825	3,523,122 16,194,415 10,111,656 1,820,664	402,260 1,445,511 164,796 125,595	2,914,022 414,644 1,189,845 201,560	
Other French Africa British South Africa Other British Africa German Africa	1907 1908 1907 1907	49	9, 647, 068 9, 272, 683 9, 060, 532 4, 432, 274	8, 651, 481 5, 150, 266 (1) 2, 659, 174	298, 531 (1) (1) (1) 42, 126	697,056 4,122,417 9,060,532 1,730,974	
Exports.	1908	F 007	*0 000 614	7 10 000	0 711 909	3 100 059	
Austria-Hungary Belgium France Germany Italy	1908 1908 1908 1908 1908	5, 961 251, 249 214, 873 222, 606 46, 164	12,983,614 50,860,145 58,859,403 104,945,862 21,437,583	7,165,063 12,518,772 28,354,595 33,691,518 16,032,094	2,711,893 10,043,915 2,076,873 9,282,000 3,098,731	3,106,658 28,297,458 28,427,935 61,972,344 2,306,758	
Netherlands Russia Switzerland United Kingdom	1908 1908	248,661 137,355 581,940	25, 671, 636 10, 480, 765 47, 097, 849 471, 331, 593	21,459,001 10,456,560 11,005,146 342,787,540	3, 445, 055 24, 205 3, 842, 618 83, 699, 868	767,580 32,250,085 44,844,185	
United States British India. Japan. Finland	1909 1909 1908 1908	8,551,789 1,522,752	31,878,566 ·37,428,252 21,474,341 503,611	21,693,080 5,528,344 7,276,464 464,762	551, 062 31, 408, 391 10, 369, 950 38, 849	9, 634, 424 491, 517 3, 827, 927	

1 Included in "All other."

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in the country is manufactured at home; and if the entire production had been manufactured here the total value of cotton goods would have been about \$1,350,000,000. As two-thirds of our raw material is utilized by European manufacturers in the production of goods which are generally of a finer quality than that of the goods made here, the value of the manufactures made from the average American cotton crop is estimated at not less than \$2,000,000,000.

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The comparative importance of cotton in the textile industry is brought out in the following statistics and discussion of textile fibers. Table 18 shows, by countries, the approximate quantities of the leading textile fibers produced in 1908.

TABLE 18.—WORLD'S PRODUCTION OF THE LEADING TEXTILE FIBERS: 1908.

[In the preparation of this table a number of sources of information have been utilized, but it has been found impracticable to secure in all instances satisfactory data for the year indicated, and only an approximation to the facts is claimed for the statistics.]

COUNTRY.	Cotton.	Wool.	Silk.	Flax.	Hemp.	Jute.
Total	Pounds. 9,787,000,000	Pounds. 2,617,641,000	Pounds. 78,500,000	Pounds. 1,846,235,000	Pounds. 1,188,869,000	Pounds, 2,524,000.00
United States	6,501,000,000 212,000,000	311, 138, 000 1, 130, 000	1	ł		
Argentina. United Kingdom. Russia	423,000,000	328, 731, 000	2,700,000			
Francetaly		78,000,000 21,500,000 41,600,000	1,333,000 10,461,000 754,000	46,109,000 41,917,000 164,620,000	166,843.000 171,728,000	
Austria. Furkey	40,000,000	75,000,000	2,825,000		mp ma 4 000	
British India	1,457,000,000	50,000,000	00,000,000		18 095.000	
China Egypt	300,000,000 638,000,000	42,253,000 3,000,000				
British South Africa. Australia.		89,783,000 552,157,000				
New Zealand All other countries	216,000,000	143,308,000 366,953,000	3,277,000	59,511,000		

The relative importance of the fibers shown in this table has been reversed during the past century. Flax fiber, which was used to a larger extent than any other fiber in 1800, now ranks fourth, and the quantity produced is only about three times what it was at that time. During the same period

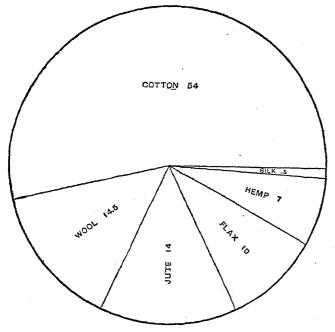
the production of wool has increased from about 500,000,000 pounds to about 2,500,000,000 pounds, or fourfold, and cotton from about 300,000,000 pounds to about 10,000,000,000 pounds, or over thirtyfold. The increase in the production of commercial jute is most remarkable. The quantity in

1850 was 60,000,000 pounds, as compared with about 2,500,000,000 pounds in 1908.

The total quantity of textile materials shown in the table is 18,042,245,000 pounds, of which cotton constitutes 54 per cent; wool, 14.5 per cent; silk, less than one-half of 1 per cent; jute, 14 per cent; flax, 10 per cent; and hemp, 7 per cent. The total supply of textile fibers entering commercial channels at the beginning of the nineteenth century amounted to approximately 1,400,000,000 pounds, of which cotton was about 22 per cent; wool, 33 per cent; silk, 2 per cent; and flax, 43 per cent.

The relative importance in 1908 of the textile fibers shown in Table 18 is graphically presented by the following diagram:

DIAGRAM 4.—Relative importance, in per cent of quantity, of the six leading textile fibers: 1908.



The total estimated value, of the raw textile materials shown in Table 18, is \$1,921,148,000, distributed approximately as follows: Cotton, \$925,850,000; wool, \$471,175,000; silk, \$255,125,000; flax, \$116,313,000; jute, \$90,864,000; and hemp, \$61,821,000. These statistics are based upon values per pound as follows: Cotton, 9.46 cents; wool, 18 cents; silk, \$3.25; flax, 6.3 cents; jute, 3.6 cents; and hemp, 5.2 cents.

Textile fibers may be divided into animal (silk and wool) and vegetable (cotton, flax, jute, hemp, and the like). Vegetable fibers may further be divided into soft fibers, as cotton, flax, hemp, and jute, and hard or root fibers, including manila, sisal, and istle. The ease and rapidity with which cotton fiber is transformed into yarn and its adaptability to all forms of woven fabrics are responsible for the manner in which it has outstripped all other fibers, and for its extensive and increasing use.

Wool.—Of all textile fibers, wool is one of the most

interesting as well as the most difficult for the manufacturer to handle. The wide range within which the production of wool is possible, together with the desirable qualities it possesses for the manufacture of clothing, have made it a most important factor in the history of civilization. Sheep can be raised in any country where warm clothing is needed, except in the polar regions, and it is natural that the woolen industry should spring up in primitive communities and among people who are too poor to buy the material for their clothing. Therefore the wool-manufacturing industry has a place in practically all countries. As a country increases in population, however, the lands must necessarily be utilized for agriculture, and the range for sheep is reduced. In recent years, consequently, the wool-growing industry in Europe and America has not kept up with that in newer countries. Nearly one-half of the world's present commercial supply of wool is produced in Australia, New Zealand, and Argentina. Notwithstanding the fact that the production in the United States is not increasing materially, wool is still produced in every state.

Silk.—The world's production of animal silk has increased during the past century from 30,000,000 pounds to about 60,000,000 pounds. The leading countries in its production are, in the order of their importance, China, Japan, and Italy. The demand for silk has been so much in excess of the supply that ingenious efforts have been made in recent years to discover substitutes, and the manufacture of artificial silk has assumed considerable importance. The founders of this industry in France have sought not so much the formula necessary for the complete combination of the chemical elements of animal silk, as to produce an article possessing the principal technical properties of silk—more particularly tenacity, brilliancy, elasticity, and aptitude for bleaching and coloring. The approximate annual production of this artificial silk is about 8,000,000 pounds, and the production appears to be unequal to the demand.

Flax.—Flax was among the earliest plants cultivated for fiber, and until the advent of cotton its fiber was used more extensively than that of any other plant. Prior to that time its cultivation was very general throughout the world. Russia produces more than three-fourths of the present supply of flax fiber and Austria, France, and Italy most of the remainder. The production of the fiber in the United States is negligible. The area cultivated for flaxseed is considerable. The average annual production of flaxseed is about 100,000,000 bushels, and of this the United States produces approximately 25 per cent; Argentina, 30 per cent; Russia, 20 per cent; and British India, 20 per cent.

Hemp.—Hemp has been cultivated and extensively used for many centuries. The present supply, as indicated in Table 18, is produced almost entirely by

Russia, Austria, and Italy. In the United States the quantity produced is small, amounting to about 11.250,000 pounds. This represents a remarkable decline in the hemp-growing industry in this country, as the production fifty years ago amounted to 149,000,000 pounds. More than half of the crop was then produced in Kentucky, which now contributes nearly all the American crop. The remainder is grown in California, Illinois, and Nebraska.

Jute.—Jute, which is the cheapest fiber used in the textile industry, is employed in greater quantities than any other, except cotton and wool. It sells for from $2\frac{3}{4}$ to $3\frac{1}{2}$ cents per pound, and is used for making binding twine, rugs, carpets, grain sacks, and even for filling in heavy silk goods. Jute butts, ranging in price from 1 to 2 cents per pound, are used for making paper, coarse bagging for covering cotton bales, and cheap twine. Practically all of this fiber is produced in India, although limited quantities are grown in China and Malaysia. Experiments show that it may be produced in the southern part of the United States, but expensive labor and the lack of machinery for the proper preparation of the fiber are deterrents to its production.

Other fibers.-In addition to the fibers shown in Table 18, several others are consumed in large quantities, especially in the manufacture of twine. Among these may be mentioned manila hemp, sisal, New Zealand hemp, istle, or Tampico fiber, and ramie. The production of manila hemp, which is used very extensively in this country for the manufacture of twine, as shown by the receipts at all shipping ports in the Philippines, for 1908, amounted to 1,052,127 bales, equivalent to about 295,000,000 pounds, while that of sisal, measured by the receipts at Mexican ports, amounted to 687,262 bales, equivalent to about 250,000,000 pounds. Practically all of the sisal comes from Mexico, although small quantities are produced in Central America and in several other countries.

The following table shows the production, imports, exports, and consumption of the leading fibers for the United States in selected years from 1880 to 1908, together with the value per pound of that imported and exported:

Table 19.—AMERICAN PRODUCTION, IMPORTS, EXPORTS, AND CONSUMPTION OF RAW FIBERS FOR SELECTED YEARS: 1880 TO 1908.

			1111100. 10						
		PRODUCTION.	imports.			EXPORTS (II			
FIBER.	Year.	Quantity (pounds).	Quantity (pounds).	Value.	Average value per pound.	. Quantity (pounds).	Value.	Average value per pound.	er
Cotton	1908 1900 1890 1880	6,501,210,800 4,729,967,500 3,736,255,500 2,733,193,500	71,072,855 67,398,521 8,606,049 3,547,792	\$14,172,241 7,960,945 1,392,728 591,120	\$0.199 .118 .162 .167	3,820,571,565 3,101,964,651 2,472,047,957 1,822,295,843	\$438, 239, 579 242, 001, 498 251, 008, 318 211, 593, 329	\$0.115 .078 .102 .116	2,246,514,000 1,923,704,600 1,193,374,641 798,344,838
Wool and hair of the alpaca goat and other like animals.	1908 1900 1890 1880	1 311, 138, 321 310, 953, 140 276, 000, 000 232, 500, 000	125, 980, 524 155, 928, 455 105, 431, 285 128, 131, 747	23,664,938 20,260,936 15,264,083 23,727,650	.188 .130 .145 .185	5, 626, 463 7, 902, 560 3, 519, 509 3, 840, 071	944,627 1,218,993 590,016 709,573	.168 .154 .168 .185	2 431, 492, 382 473, 528, 347 425, 000, 000 320, 000, 000
Silk, including cocoons	1908 1900 1890 1880		15, 424, 228 11, 289, 314 6, 105, 891 2, 562, 236	63, 665, 826 44, 567, 907 23, 373, 621 12, 024, 699	4. 128 3. 956 3. 828 4. 693	91,541 119,158 18,923 9,417	384,852 452,702 77,595 49,667	4.204 3.799 4.101 5.274	215, 332, 687 10, 335, 692 6, 654, 038 2, 690, 482
Flax	1908 1900 1890 1880	241,389 1,565,546	19,056,000 13,934,000 16,096,000 8,756,000	2, 514, 680 1, 646, 274 2, 188, 021 1, 248, 919	.132 .118 .136 .143	80,000 10,000	8,244 85	.103	218,976,000 16,980,646 216,337,389 210,321,546
Hemp	1908 1900 1890 1880	11,250,000 11,750,630 23,022,000 10,050,000	12,426,000 6,800,000 873,182,000 849,804,000	1,086,805 450,269 87,341,956 83,068,004	.087 .066 .100 .062	1,162,000 300,000 3496,000 31,385,100	111, 938 17, 196 3 54, 323 3 77, 992	.096 .057 .110 .056	222,514,000 25,588,715 295,708,000 258,468,900
Jute	1908 1900 1890 1880		215,066,000 205,386,000 180,798,000 4164,942,000	6,504,920 3,956,413 3,249,926 45,075,945	.030 .019 .018 .031	436,000 54,000 838,000 41,232,000	19,377 1,315 10,517 466,743	. 044 . 024 . 013 . 054	² 214,630,000 206,249,826 ² 179,960,000 ² 163,710,000
Manila	1908 1900 1890		104,934,000 85,248,000 (5)	. 8,974,617 7,172,368 (⁵)	. 086	5,822,000 2,042,000 (⁶)	525, 327 246, 034 (⁶)	.090 .120	² 99,112,000 123,241,820
Sisal	1908 1900 1890		207, 988, 000 153, 842, 000 (6)	14,047,369 11,782,263 (6)	. 068	5,240,000 2,786,000 (6)	326, 116 205, 568 (6)	.062	² 202,748,000 146,352,853
Other vegetable fibers			47,664,000 33,402,000 7120,588,000	2,367,922 1,366,218 77,761,864	.050 .041 .064	1,118,000 3,706,000 710,686,000	63,419 201,855 7736,627	.057 .054 .069	² 46, 546, 000 ² 29, 696, 000 ² 109, 902, 000

¹ From report of National Association of Wool Manufactures, and does not include mohair. 2 Consumption figures arrived at by deduction.

³ Includes manila, etc.
4 Includes fibrous grasses.
5 Included under "Hemp."
6 Included under "Other vegetable fibers." 7 Includes sisal.

In the preparation of the above table access has been had to a number of sources, but only approximate accuracy can be claimed for some of the statistics. Except for 1908 the statistics of production and consumption relate to the preceding year, and except where otherwise stated were collected by the Census Bureau. Those for imports and exports are for the fiscal year ending June 30. The aggregate quantity of textile materials produced in the United States in 1908, as shown in the table, is 6,823,599,121 pounds; the quantity imported, 819,611,607 pounds; and the quantity exported, 3,840,147,569 pounds. In 1880 the production of textile fibers in the United States amounted to 2,977,309,046 pounds, which indicates an increase of nearly 130 per cent in twenty-eight years.

The imports of textile materials during this period have increased 129 per cent and the exports 110 per cent, while the consumption has increased from 1,353,535,766 pounds to 3,297,865,069 pounds, or 143 per cent. The most notable features shown by the table are the increases in the production and consumption of cotton and in the consumption of silk. In the consumption of silk the United States ranks next to China and consumes about one-fifth of the total production. The increasing importance of manila, sisal, and istle for use in the manufacture of cordage and twine is noteworthy; the increase in the quantity of jute imported has about kept pace with the increase in the production of cotton, because by far the greater portion of this material is used in the manufacture of bagging for covering cotton bales.